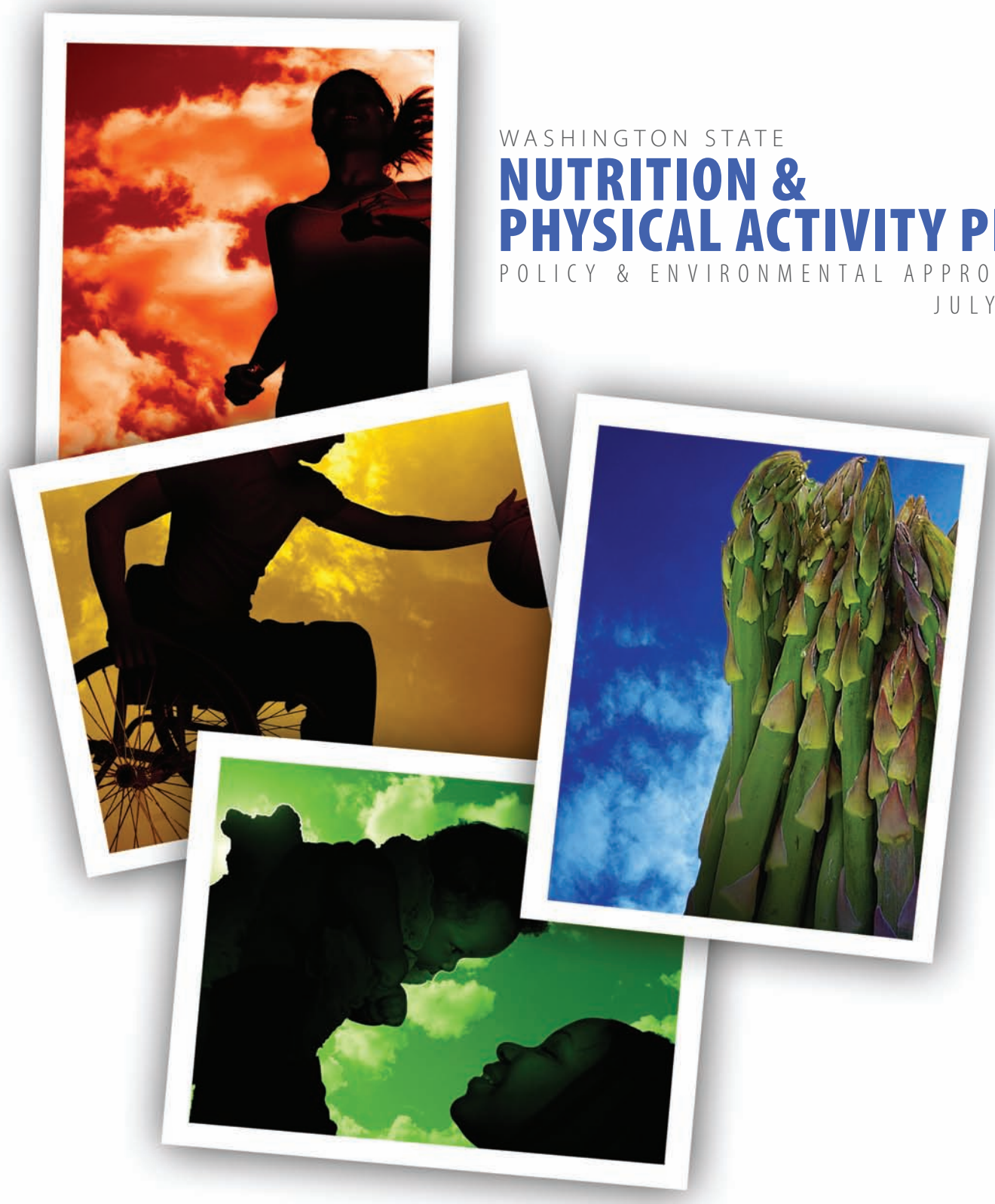

WASHINGTON STATE

NUTRITION & PHYSICAL ACTIVITY PLAN

POLICY & ENVIRONMENTAL APPROACHES

JULY 2008

Washington State Department of Health

energize your life!
Eat Healthy - Be Active

STATE OF WASHINGTON
DEPARTMENT OF HEALTH
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July 2008

Dear Community Partner:

The revised Nutrition and Physical Activity Plan builds on our first state strategy to encourage healthy lifestyle choices to prevent obesity and chronic diseases in Washington. This updates the work we began in 2003.

The plan focuses on development of policies to change the environments where we live, work, and play. This will help people in our state live longer healthier lives by reducing the burden of chronic diseases like diabetes, heart disease, and cancer.

Thank you to everyone who helped assure that this is much more than words on a page. "Partners of the Plan" include state and federal agencies, educational institutions, nonprofit organizations, local health agencies, and private industry. We now have a wide range of tools to use, along with clear objectives and examples. This represents the very best in public health collaboration.

Our goal is to help reduce barriers to physical activity and healthy eating. This will take more than changing individual behaviors. We have to create physical, social, economic, and political environments that support this goal. Working together, we can help make Washington communities healthier.

Thank you for your commitment to make the healthy choice the easy choice.

Sincerely,

Mary C. Selecky
Secretary

Special acknowledgements

The Washington State Department of Health would like to thank all the statewide partners who are working to put the Washington State Nutrition and Physical Activity Plan into action. A list of Washington's Partners in Action can be found online at www.wapartnersinaction.org.

We extend special thanks to the members of the Healthcare Work Group, who devoted many hours to discussions and decisions to expand the revised state plan to include a healthcare component.

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APPENDICES

WASHINGTON STATE
Nutrition & Physical Activity Plan

The Purpose

The purpose of the Washington State Nutrition and Physical Activity Plan is to provide a framework in which policy makers at the state, local, and institutional levels can work together to support and build environments that make it easier for Washington residents to choose healthy foods and to be physically active to:

- Slow the increase in the proportion of adults and children who are obese.
- Reduce rates of chronic diseases that are associated with obesity.
- Improve quality of life.

Public Health in Washington

Helping communities make changes so people can make healthy choices

Public health uses a systematic approach to understand the conditions that make healthy eating and sufficient physical activity achievable for everyone. While the practice of medicine focuses on individuals, public health focuses on the health of populations and population subgroups. Monitoring and tracking data show relationships between unhealthy behaviors and developing chronic conditions such as obesity, asthma, diabetes, heart disease, stroke, and cancer. Public health policy uses effective, tested strategies to address factors that make it hard for people to get the physical activity or healthy nutrition they need. Public health engages partners at the state and local level to implement those strategies.

Updating the Plan

Beginnings

The first plan was developed in 2001 and 2002. It was based on a series of meetings with advisors who represented a wide variety of agencies and approaches to food and nutrition, physical activity, transportation and community development. This advisory group used a strategic planning process to consider broad-based approaches to obesity prevention. Across the

The Vision

Washington residents will enjoy good nutrition, have active lives, and live in healthy communities.

state, agencies and organizations agreed to champion parts of the plan that were within their scope of work. Between 2003 and the end of 2007 more than 600 stakeholders identified themselves as "partners of the plan" and 175 articles about their progress were published on the Washington Partners in Action Web site – WaPartnersInAction.org.

In 2007, Washington State Department of Health and the University of Washington Center for Public Health Nutrition collaborated to update the plan. We conducted in-depth interviews, online surveys and correspondence with members of the original advisory group and many others who use the plan. In addition, we searched medical and public health peer-publications for updates on policy and environmental approaches and sought out the latest evidence based recommendations from government and professional organizations. Each of the six chapters of the plan objectives and priority recommendations was reviewed extensively by key stakeholders throughout the updating process.

The Plan's Focus

The plan is based on scientific evidence about obesity prevention. It emphasizes environmental and policy approaches to build a foundation for stemming the rapid increase in rates of overweight and obesity. All obesity prevention and treatment initiatives will be more successful when Washington residents live in environments that make it easier to eat well and be active.

Why an Environmental and Policy Approach?

On an individual level, obesity can be prevented if people simply move more and eat less.[1] Unfortunately, social, cultural and environmental constraints make it difficult for most individuals to follow this advice, as evidenced by the fact that over half of Washington adults are either overweight or obese.[2] Behavior choices and subsequent health outcomes are profoundly affected by cultural influences as well as by the food and activity opportunities available at the individual and community levels.[3] The Institute of Medicine reminds us that, "Health and well being are affected by a dynamic interaction between biology, behavior, and the environment, an interaction that unfolds over the life course of individuals, families, and communities."[4] For this reason, our state plan emphasizes development of policies to influence physical activity and nutrition environments in schools, workplaces, communities, and healthcare settings. Policies are formal or informal guidelines for decision-making aimed at achieving a desired outcome.

See Appendix A for an explanation of models and theories for the plan's approach.

Criteria for the Plan's Priority Recommendations

Recommendations and strategies in the plan should be:

- Related to obesity and chronic disease prevention.
- Population-based.
- Evidence-based, theoretically sound, or recommended by nationally recognized authorities or experts.
- Have the potential to affect a large portion of the population.
- Based on measurable objectives.

The Dietary Guidelines for Americans are the foundation for the nutrition recommendations in this plan.[5] The United States Departments of Agriculture and Health and Human Services developed the guidelines as a resource to support nutritious diets, daily physical activity, and maintenance of a healthy weight to promote good health and protect against disease. Guidelines and recommendations from national physical activity organizations were used to support the physical activity objectives.[6,7]

A more detailed explanation of the criteria for updating the plan is presented in Appendix B.

Working with Partners

Genuine solutions to the challenging problem of obesity require the concerted effort of many partners and collaborators. The department continues to provide essential leadership for obesity prevention efforts. Other state agencies including the Office of the Superintendent of Public Instruction, the Department of Social and Health Services, the Department of Agriculture, and the Department of Transportation have joined in these efforts. Professional associations and advocacy groups contribute by educating their members about the issues, developing effective policies to support the plan and helping to implement these policies in communities throughout Washington.

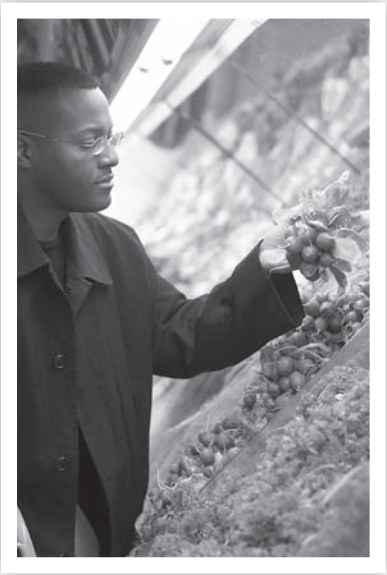
In 2002 the City of Moses Lake began piloting the plan strategies through its Healthy Communities projects. Since then more than a dozen communities across Washington have launched their own Healthy Communities projects that identify, promote and implement local plans for changes in policies that will make healthier choices easier in their communities.

Communication

The department and the partner agencies for this plan are committed to using effective communication to make sure that individuals and policy makers within communities and institutions are aware of the importance of making the healthy choice the easy choice. This plan is a springboard for promoting nutrition and physical activity in the media and at state and local meetings and conferences. Awareness campaigns contribute to the success of environmental

and policy changes.[7] For instance, signs and media coverage increase the use of trails and paths in a community. Awareness campaigns help potential partners and the public understand why the activities outlined in this plan are important and how they are being implemented.

Cultural Competence and Health Disparities



Environmental and policy changes can help reduce health disparities in Washington. The first step is cultural competency. The U.S. Office of Minority Health & Health Disparities (www.omhrc.gov) says that "cultural competency is one of the main ingredients in closing the disparities gap in health care." Health disparity, or health inequity, refers to "large and persistent gaps in health status." Many different populations are affected by disparities including racial and ethnic minorities, residents of rural areas, women, children, the elderly, and persons with disabilities.

Nutrition and physical activity are perceived differently across cultures within the state. Real changes in nutrition and physical activity behaviors cannot happen unless health promotion efforts are culturally competent. Five essential elements contribute to the ability of a system, institution, or agency to become more culturally competent.[8]

These must have:

1. A value of diversity.
2. The capacity to assess the ability to serve diverse populations.
3. Knowledge, attitudes, and skills to deal effectively with the dynamics inherent when cultures interact.
4. Institutionalized cultural knowledge.
5. A service-delivery process that deals effectively with cultural diversity.

The department and its partners will proceed with respect and awareness of differences in the way nutrition and physical activity are perceived and the way behavioral choices are made. Examples of culturally competent approaches are included with each objective.

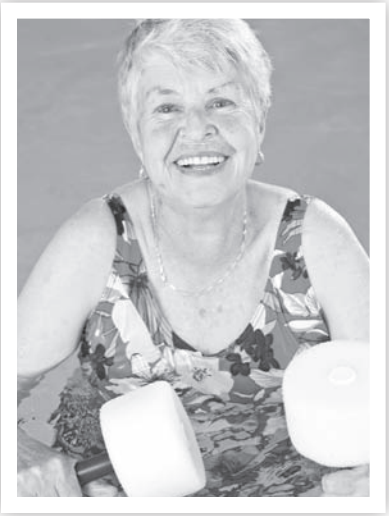
Assessing Needs and Measuring Progress

Public health has a responsibility to track the impact of changes as the plan is put into action, and to share successes and lessons learned. The Department monitors progress on the plan's objectives and communicates results with partners and stakeholders.

Using the Plan

The plan includes six objectives, three for nutrition and three for physical activity. There are 15 priority recommendations to meet these objectives. Each priority recommendation includes examples. These examples are not meant to be prescriptive, but to illustrate policies in action. The reference section provides links to more information about the strategies.

Agencies, institutions and groups involved in these efforts will champion the priority recommendations in their own work plans. The plan will stimulate new ideas, partnerships and coalitions, and will be used by policy makers across the state to take actions to prevent further increases in obesity.



Nutrition, Physical Activity and Health in Washington

Individuals, families, and society pay a high cost when physical activity and healthy diets are not part of daily life. Poor diet and lack of physical activity cause at least 300,000 deaths in the United States each year.[1] Only tobacco use causes more preventable deaths. Poor diet and physical inactivity are associated with the disabilities and lower quality of life that result from diabetes, cardiovascular disease, cancer, osteoporosis, obesity and stroke.[2] These chronic diseases account for seven of every ten United States deaths and for more than 60 percent of medical care expenditures.[2]

In 2000, the direct medical cost attributable to obesity in the United States was $61 billion.[2] By 2003 the estimated medical cost attributable to obesity had increased to $75 billion.[3] In Washington, the cost of obesity related medical expenses, paid by Medicare and Medicaid, was estimated to be $365 million per year.[3]

The United States spends more money per capita on health care than any other country in the world, but 27 countries have longer average life spans.[4] Medical care expenditures could be profoundly reduced by developing effective ways to promote nutrition and physical activity.

Burden of Obesity

In 2006, about 60 percent of adults in Washington were either overweight (36 percent) or obese (24 percent).[5] The prevalence of obesity in Washington has more than doubled since 1990. National data show a similar increase in obesity across the country.[6]

The percentage of young people in the United States who are overweight more than doubled in the last 20 years.[6] In Washington, 11 percent of tenth grade youth were obese and 14 percent were overweight in 2006.[5] Higher rates of overweight and obesity in children threaten to reverse the gains in life expectancy made throughout the twentieth century as people benefited

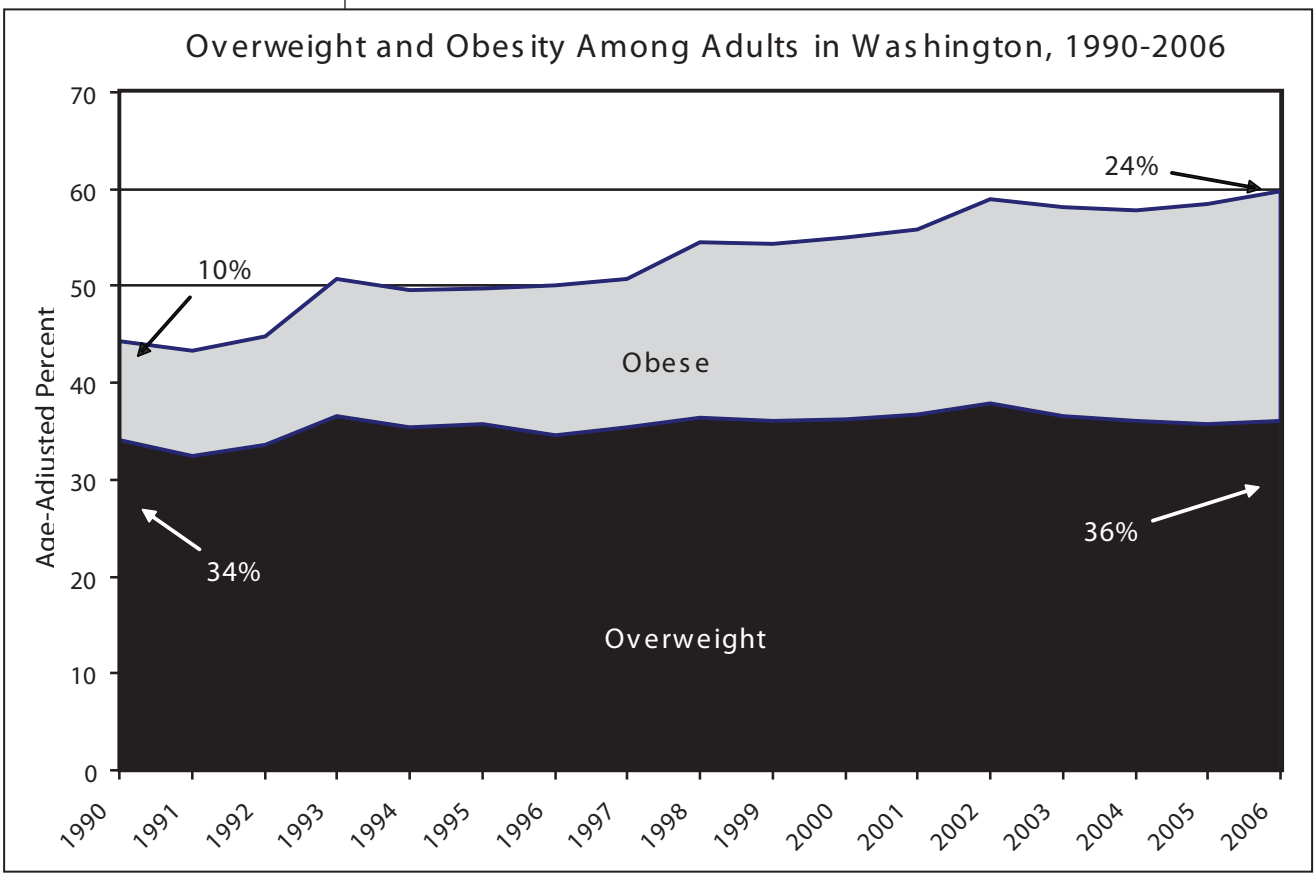
from advances in public health and medicine.[7] Children who are obese are more likely to develop chronic diseases like type 2 diabetes and coronary heart disease earlier in life than lean children from previous generations.[8]

Definitions: Body Mass Index (BMI), Obesity, and Overweight

Body Mass Index (BMI) is a number calculated from a person's weight and height. BMI provides a easy way to estimate body fatness for most people and is used to screen for weight categories that may lead to health problems. BMI is a mathematical formula in which a person's body weight in kilograms is divided by the square of his or her height in meters. A BMI of 25 to 29.9 is considered overweight. A BMI of 30 or more is considered obese.

Obesity: An excessively high amount of body fat in relation to lean body mass. Body fat can be more accurately estimated by skinfold measure, by waist-to-hip circumference ratios, or by techniques such as ultrasound, computed tomography, or magnetic resonance imaging (MRI)..

Overweight: Increased body weight in relation to height, when compared to a standard of acceptable or desirable weights. Overweight may or may not be due to body fat. Professional athletes may be very lean and muscular with very little body fat. However, they may weigh more than others who are the same height because muscle weighs more than fat. While they may qualify as "overweight," they are not necessarily "over fat."



The social and financial costs of obesity are not distributed evenly among all Washington residents. In 2005 and 2007, the proportion of adults who were obese ranged from 13 percent in San Juan County to 36 percent in Adams County. Nine counties had obesity rates that were higher than the rest of the state: Adams, Columbia, Cowlitz, Grant, Grays Harbor, Lewis, Pacific, Pierce, and Yakima counties. Jefferson, King, San Juan, and Whatcom counties had obesity rates below the rest of the state. Asians and Pacific Islanders have the lowest prevalence of obesity followed by whites. American Indians and Alaska Natives, blacks, and adults of Hispanic origin have the highest prevalence of obesity. Higher prevalence of obesity is associated with lower levels of income and education. Adults with annual household incomes of less than $20,000 are 40 percent more likely to be obese than those in households with annual incomes of $50,000 or more. College graduates have lower prevalence of obesity than those with less education.[9]

Concern about body weight is not merely a cosmetic issue. Obesity has significant short- and long-term health effects. People who are obese or overweight are more prone to develop hypertension, elevated blood cholesterol, and diabetes.[8] They are more likely to die at an earlier age than adults who are not obese. Washington adults who are obese are about three times more likely to have diabetes compared to adults who are not obese.[9] Obesity also complicates the management of type 2 diabetes and increases the risk of cardiovascular complications and cardiovascular mortality in people with type 2 diabetes.[7,10] Obesity and overweight also affect mental health and are associated with decreased emotional well-being.[11]

Preventing Chronic Disease and Promoting Lifelong Health

Chronic diseases like heart disease, cancer, stroke and diabetes are prevalent and costly. They are also, to a great extent, preventable.[12] Women who maintain a desirable body weight, eat a healthy diet, have regular physical activity, do not smoke, and consume a moderate level of alcohol have 83-percent less risk of heart disease than women who do not have these health-promoting behaviors.[13] When more people choose active lives and nutritious diets, the burden of chronic disease in Washington will decrease.

The Health of Washington State 2007, published by Washington State Department of Health, contains more information on obesity-related chronic diseases and their prevalence in Washington, and is located online: www.doh.wa.gov/hws

Healthy Eating

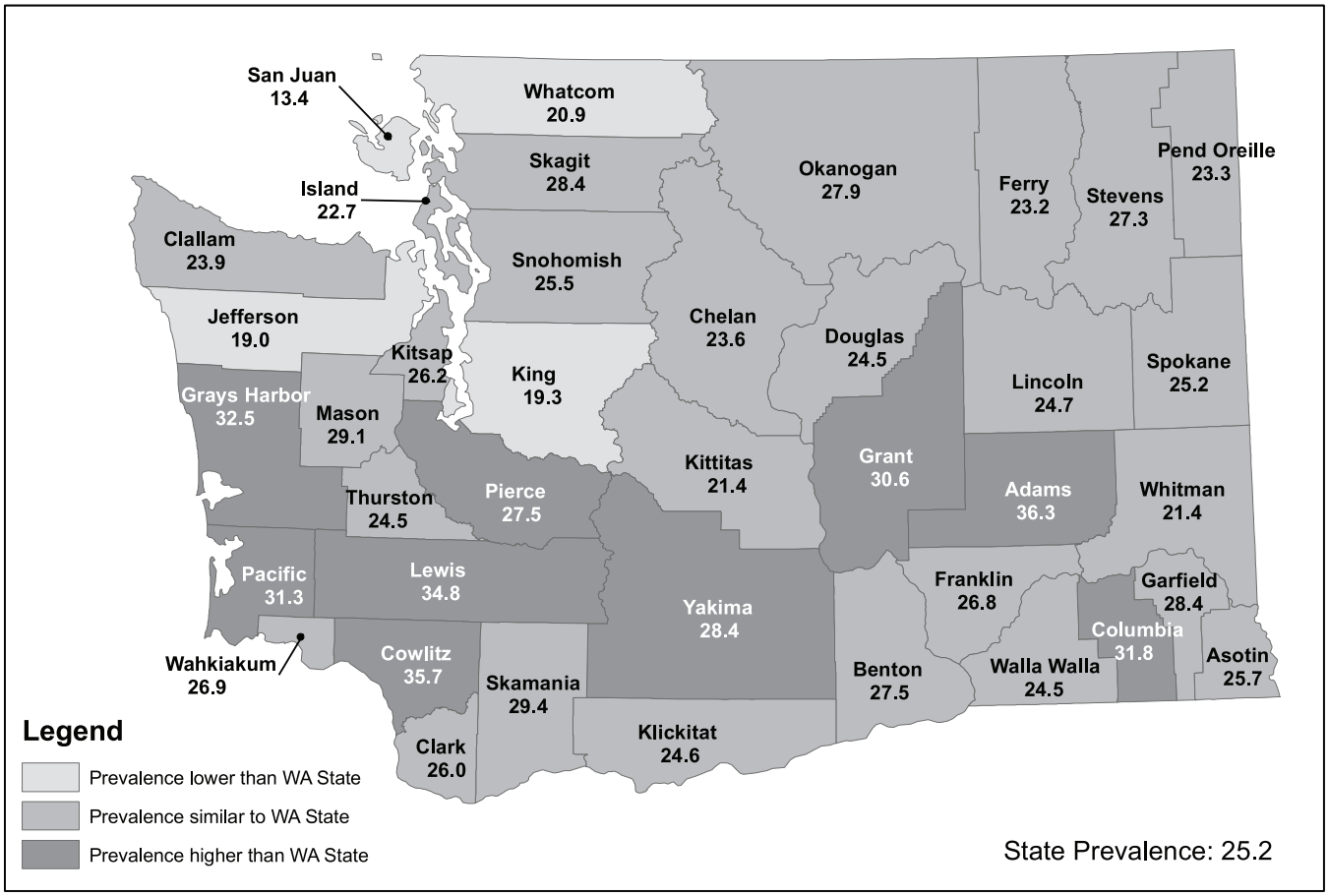
Healthy eating lowers the risk of chronic diseases including cardiovascular disease, hypertension, some types of cancer, diabetes, and osteoporosis.[8] Consuming at least five daily servings of vegetables and fruits may prevent

cancer, especially cancer in the mouth, pharynx, larynx, esophagus, lung, stomach, colon, rectum, bladder, and cervix.[14] Coronary heart disease, stroke, cataract formation, diverticulosis, and hypertension may also be prevented by increasing vegetable and fruit intake.[15] Increasing consumption of vegetables and fruits might also be an effective strategy in the treatment of obesity.[16] Eating low-energy dense foods, such as fruits and vegetables, might protect against obesity. Foods with low-energy density have fewer calories per weight than foods with high-energy density. Foods naturally high in fat and foods with added fat, like fried foods, have high-energy density.[17,18] Other dietary factors, like adequate intake of whole grains and calcium and low intake of saturated and trans-fats are important in preventing chronic disease.[19]

In 2005, one in four adults in Washington (25 percent) ate fruits and vegetables five or more times a day.[5] Because people often eat more than one serving of fruits and vegetables at a given time, it is estimated that about half of Washington adults are likely to eat five or more servings of fruits and vegetables daily.

Geographic Variation of Obesity Prevalence in Washington

Percentage of Obesity by County, 2005 - 2007

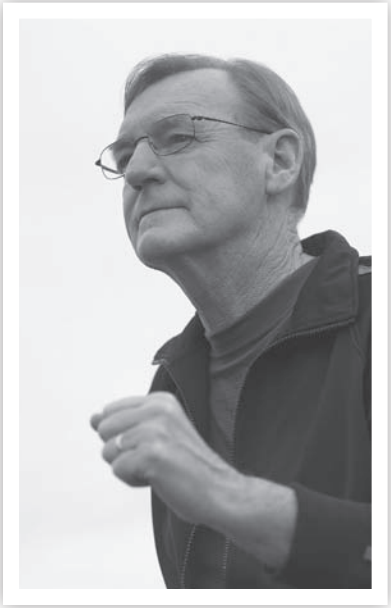


Data Source: Washington Behavioral Risk Factor Survey, 2005 - 2007

For most babies, breast milk provides the best early nutrition. Breastfeeding is associated with a decreased risk for many early-life diseases and conditions, including ear and respiratory tract infections, eczema, gastroenteritis, type 2 diabetes, sudden infant death syndrome, and obesity.[20] Breastfeeding also is associated with health benefits to women, including decreased risk for type 2 diabetes, ovarian, and breast cancer. Efforts to increase breastfeeding should be broad-based and include health-care providers and the community.

The Dietary Guidelines, developed by the United States Department of Health and Human Services and the United States Department of Agriculture, provide science-based advice to promote health and to reduce risk for major chronic diseases through diet and physical activity.

See Appendix F: Healthy Eating Guidelines.



Physical Activity

Being physically active and limiting sedentary behaviors, such as watching TV, protect against overweight, obesity, heart disease, high blood pressure, type 2 diabetes, some cancers, and falls and fractures.[8,14] Physical activity is essential to healthy aging and is an effective component of prevention and treatment of mental health disorders.[21,22,23] Children and adults of all ages gain immediate benefits by being active as well as long term protection against disease and disability.

For health benefits, the recommended minimum amount of physical activity is at least 30 minutes of moderate activity on five or more days a week, or at least 20 minutes of vigorous physical activity three or more days per week.[19] When work-related activity was considered along with leisure time activity, 64 percent of Washington adults reported activity at the recommended level in 2005.[5] When just leisure time activities were counted, only 54 percent of adults met recommended activity levels. In 2006, only 47 percent of Washington students in grade eight, 42 percent in grade ten, and 39 percent in grade 12 met the *Dietary Guidelines for Americans-2005* recommendation of at least 60 minutes of physical activity on most days of the week.[24,25]

Healthy Aging

In Washington in 2006, 11 percent of the population was aged 65 and older. By 2030, the proportion of older adults will increase to 20 percent.[5] As the state's population ages the burden and costs of chronic conditions could increase substantially since 75 percent of Washington's health-care costs are due to chronic diseases.[5,26] However, much of the physical decline associated with aging is preventable,[27] and steps can be taken to reduce the health care costs and loss of quality of life in an aging population. *National Blueprint: Increasing Physical Activity Among Adults Age 50 and Older* calls for instituting urban design policies based on the needs and preferences of older adults.[28] People of all ages would

likely benefit from pedestrian and bicycle-friendly communities, mixed-use development, slower traffic patterns, better street lighting, and improved access to quiet green spaces.[2]

See Appendix H: For Information on Physical Activity and Aging

New to the Plan in 2008

- Role of families and individuals
- Role of the healthcare sector
- New examples chosen from hundreds of initiatives across that state to illustrate how policy and environmental changes can make a difference
- Call-out boxes highlight cultural competence, provide new data and suggest communication approaches
- Importance of working with partners and coalitions

New resource appendices:

- Washington Administrative Code for Physical Education
- Coordinated School Health
- Definition of "healthy foods"
- Physical Activity for Healthy Aging

The Healthcare Sector

In 2007, the Department of Health formed a Primary Prevention Advisory Committee including internal and external stakeholders. The committee's purpose was to recommend how clinical medicine could participate in this state plan. The healthcare sector is diverse, and includes healthcare providers, health plans, and academia. All have roles to play to prevent obesity and chronic diseases. They are important partners for communities, worksites, and schools. The revised Washington State Nutrition and Physical Activity Plan includes strategies and examples of policy and environmental approaches within the healthcare sector.

Overarching Strategies

Each priority recommendation includes these essential ingredients for success:

- Working with partners
- Communication
- Cultural competence
- Surveillance, assessment, evaluation

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NUTRITION
OBJECTIVES

NUTRITION OBJECTIVE 1:

Increase access to health-promoting foods

The *Dietary Guidelines for Americans* are part of a science-based system to provide the most up-to-date advice about diet and health in the United States. The 2005 guidelines recommend eating a variety of fruits and vegetables, low fat dairy and meats, whole grains, and healthy fats within caloric needs while limiting intake of unhealthy fats, added sugars, sodium and alcohol.[1] People who follow the dietary guidelines are at lower risk for overweight and obesity, and chronic conditions such as diabetes, hypertension and cardiovascular disease.[2,3,4,5] However, the diets of most Washington residents vary substantially from the recommendations.

Families and Individuals

Families and individuals choose diets that reflect the *Dietary Guidelines for Americans,* when they have:

- Access to healthy foods at school, work, and in the community.
- Enough money to buy the kinds of foods recommended in the guidelines.
- Knowledge about nutrition.
- Motivation to choose healthy foods.
- Confidence that they can cook healthy foods.
- Healthy foods in their homes and daily environments.
- Social, cultural and family support for eating healthfully.
- Eating patterns that include frequent meals with family and/or friends eating together.

Supporting Healthy Eating

Although dietary advice and interventions to increase nutrition knowledge, motivation, and cooking skills can help people eat better, dietary intake is also strongly influenced by social, economic, and cultural factors.[6] Most people base their food choices on taste, cost, and convenience.[7] Many foods recommended in the dietary guidelines, like whole grains and some fruits and vegetables, are more expensive than highly processed foods that have sugar and fat as main ingredients. Foods like fresh and attractive fruits and vegetables may be harder to find in low-income neighborhoods. The following recommendations can help individuals and families make healthy food choices.

See Appendix G: For Information on Defining Healthy Foods.

Priority Recommendation A:

Assure that communities provide access to healthy foods and beverages.

It is easier to eat healthy when neighborhoods have stores, restaurants, markets, and gardens that provide attractive, affordable healthy foods. People eat away from home more now than ever before, and people who eat away from home eat higher fat, higher calorie foods than those who prepare meals at home.[8] Diet quality and the prevalence of overweight are associated with the type, location, and number of grocery stores, convenient stores, supermarkets, and restaurants in a neighborhood.[9,10] Food choices are also influenced by the variety and quality of foods, portion sizes, and price of foods available in restaurants, grocery stores, and convenient stores in their neighborhoods.[11]

Getting to the store is sometimes a barrier to eating healthy. Transportation for food shopping can be difficult for rural residents, those with disabilities, and those who depend on public transportation. Comprehensive transportation planning includes consideration of the need for active transportation by walking or biking to food markets as well as access to food outlets by those who do not use private cars.

In 2005, most Washington adults (84 percent) said they could find many healthy food choices available in their local grocery store. But fewer (59 percent) said they could find healthy food for meals eaten away from home at delis or restaurants.

Examples of Activities:

Establish regional and local food planning mechanisms, such as food policy councils to set priorities in increasing access to healthy foods.

Local partners from land-use planning, public health, agriculture, transportation, restaurants, retail food sector, food service, anti-hunger advocates, and others can come together to build a strong and comprehensive community food system. Food systems planning can preserve

farmland, encourage mixed use neighborhoods with access to grocery stores and farmers markets, establish green space through community gardens, and promote wise use of transportation resources.[12] King County's Acting Food Policy Council is made up of representatives from city and county government, food and anti-hunger organizations, grocery stores, academic departments, and community groups. The council's goal is to ensure that all residents have access to nutritious, fresh food that is produced and distributed in a just manner; and that farming, food processing and distribution flourish as part of the local economy and contribute to a healthy environment.[13]

In 2005, about half of Washington adults said they ate five or more servings of fruits and vegetables daily.

Use planning strategies to increase access to healthy food.

The American Planning Association adopted a series of policies on community and regional food planning.[12] The Tacoma-Pierce County Health Department (TPCHD) conducted a Health Impact Assessment in Puyallup to assess potential health consequences of neighborhood restaurants and grocery stores. The assessment is used by TPCHD in its work with the planning commission to ensure access to healthy foods. The Seattle Food Systems Enhancement Project, after conducting a community food assessment, recommended that Seattle consider economic incentives or rezoning for retail stores in neighborhoods with limited food resources as a way to increase access to quality food sources. http://courses.washington.edu/emksp06/SeattleFoodSystem/Final_Food_Report.pdf

Support farm to institution programs.

Skagitonians to Preserve Farmland, a 501(c)3 based in Mount Vernon, in partnership with the Economic Development Association of Skagit County, is working to link farmers to healthcare institutions. Hospitals will benefit from the opportunity to use local, sustainable food to promote nutrition and wellness, while Skagit growers will have more secure and diverse markets by contracting with local and regional healthcare agencies.[14]

Support farmers market programs that make vegetables and fruits more accessible and available to disadvantaged populations.

The Washington State WIC Farmers Market Nutrition Program (FMNP) successfully provides vegetables and fruits from farmers markets to nutritionally at risk women, infants and children and increases awareness and use of the markets. Washington WIC participants reported that the FMNP increases their access to fresh fruits and vegetables and that their families eat more fruits and vegetables during FMNP time than during other times of the year.[15] The WIC and Senior Farmers Market programs also help to assure the financial sustainability of local markets and farmers. In Mount Vernon, residents at senior housing can take free transportation to the Wednesday farmers market at Skagit Valley Hospital.

Communication

Use marketing strategies to encourage purchases of healthy foods.

Health communications and marketing campaigns using billboards, in-store sales, and targeted consumer coupons have been successful in increasing sales of fruits and vegetables in retail stores. These strategies should involve reducing the cost of fruits and vegetables, increasing convenience within a community, or enhancing the flavor and taste of fruits and vegetables.

Support use of Electronic Benefit Transfer point of purchase machines at farmers markets.

Since food stamps went from paper stamps to Electronic Benefit Transfer (EBT), farmers markets have created new systems so food stamp participants can shop at the markets. Port Townsend Farmers Market has an EBT system in place and is marketing this change to food stamp participants to increase the number who shop at the market.

Support community gardens.

To be successful, a community garden needs commitment by local leaders and staff, community participation, and provision of skill-building activities.[16] Moses Lake is the site of two community gardens. A downtown garden serves local businesses and community groups, and a garden in a low-income neighborhood enhances access to produce in a part of town where residents have very little access to fruits and vegetables.

Support healthier choices in dining out venues.

Many customers will choose healthier menu items when they are marketed as healthy or offered at a lower cost than less healthy items.[17,18] Restaurants can often offer healthier options to community residents at the same price as the less healthy options, a strategy implemented by the Rainier Valley Health Coalition. Following consultation with dietitians, 12 diverse, ethnic restaurants made changes to recipes to make them lower in calories and fat and added more healthy foods to their menus.

Support healthier food choices throughout the community environment.

The Gig Harbor YMCA has made the healthy choice the easy choice in their new facility. They provide only healthy items in vending machines. The YMCA also encourages healthy role modeling among the employees by having healthy foods at employee potlucks and discouraging fast food consumption at work.

Support healthier food choices in child care settings.

Child care settings can be important influences on food intake of infants and young children.[19] In the United States, 60 percent of children from birth to five years old spend an average of 29 hours per week in child-care facilities.[20] Maria Consuelo Lopez, a family home child-care provider in Shoreline, takes full advantage of the Child and Adult Care Food Program (CACFP) and provides freshly prepared healthy foods for the children in her care. Ms. Lopez goes beyond the basic nutrition requirements of CACFP: the children are often served organic foods and enjoy a variety of homemade ethnic foods.

Priority Recommendation B:

Assure that worksites, including healthcare services and schools, provide healthy foods and beverages.

Most adult Americans spend a substantial part of their time at work, so increasing the intake of healthy foods is a promising way to improve access to healthy foods. Employees say they want healthier vending and cafeteria choices.[1] Changing the variety, labeling and pricing of foods and providing protected time for lunch can make a difference.[2,3]

Examples of Activities

Provide healthier snacks in vending machines. Healthy vending initiatives are successful when they provide a variety of tasty and popular healthy items, use motivational/promotional signage, label healthy items, and reduce the price of healthier options.[4,5] Clark County Community Choices 2010 is working to achieve a healthier mix of food and beverage selections in the area's vending machines. In Clark County, a team that includes vending industry, school, and worksite partners has piloted Fit Pick™, a healthy vending program that will be implemented throughout the county (www.fitpick.org).

In 2006, fewer school principals reported that candy and salty high-fat snacks were available in vending machines or school stores, compared to previous years. However, sales of fruits and vegetables through these school venues remained low.

Provide health-promoting foods in worksite cafeterias.

Swedish Medical Center offers a wide variety of fresh vegetables, grains, and protein/lean meat choices for lunch and dinner. Each healthy choice is available a la carte or a guest can take a 15-percent discount from the cost of the meal if they choose a balanced plate with one grain, one vegetable, one lean meat, and sauce. Swedish's food service sources 60 different fresh vegetables locally that added up to nearly 3000 total cases of product in 2007. SEH America, a supplier of silicon wafers to the semiconductor industry launched a workplace wellness program in 2007. Among other wellness initiatives, the Vancouver, Washington-based company created an on-site cafeteria for the 1000 plus employees and contractors. They selected a vendor that offered a variety of quality and healthy food options that would appeal to the company's diverse population. Everyday items include salads, soups, hot cereals, and fruit/vegetable snack packs. Hot entrée choices often include fish, steamed vegetables, and whole grains.

Provide health-promoting foods at meetings and workshops.

The department modified policy procedures to encourage meeting planners to "make the healthy choice the easy choice" at meetings and events. Meeting planners at the department use "Energize Your Meetings" to plan nutritious meals and physical activity at each event. King and Clark counties also encourage the use of healthy meeting guidelines for meetings and events.

Priority Recommendation C:

Assure that schools provide healthy foods and beverages.

According to a national study, most school-aged children are spending between six and eight hours at school and eating 19-50 percent of their daily food at school five days a week.[1] As part of an integrated Coordinated School Health Program (*Appendix E*) schools can promote well-being and readiness to learn by making it easy for students to choose healthy foods.

When they provide pleasant eating environments, plenty of time to eat, and foods and beverages that reinforce the health education messages that children receive in their classrooms, schools play a critical role in teaching and modeling healthy eating behaviors.[2,3]

Over the past 20 years, the proportion of foods eaten by children as part of the school meal program has declined while fast food consumption has increased.[4] The number of alternative food sources and commercial advertising of foods on school campuses has also increased.[2,5] Competitive foods — offered through à la carte service, school stores, snack bars, and vending machines — are often high in calories and low in nutrients. Higher sales of these items result in lower participation in school lunch programs.[2] In Washington, 70 percent of eighth graders, 75 percent of tenth graders and 78 percent of 12th graders do not eat enough fruits and vegetables.[6] Children who participate in the National School Lunch (NSLP) and School Breakfast Programs (SBP) eat more fruits and vegetables and drink fewer sodas than children who don't eat school meals.[1]

Cultural Competence

Healthy foods are produced by American Indian tribal organizations in Washington State. For example, Quinault Pride Seafood (http://www.indigenouspeople.net/quinaul.htm) exports salmon products that are high in healthy omega three fatty acids and a good source of protein.

Yakama Indian Nation's Tribal Land Enterprise exports apples and cherries and has been a model tribal program since 1950.

Tribal elders and native plant specialists collaborate on the Native Plant Program at Northwest Indian College in Bellingham. This program is designed to reestablish native food systems in 10 tribes around Puget Sound through education directed to cultural specialists, nutritionists, cooks and tribal members about the benefits of native foods.

Examples of Activities:

Adopt and implement policies that assure that all foods and beverages available on school campuses and at school events contribute toward eating patterns that are consistent with the *Dietary Guidelines for Americans*.

School nutrition policy initiatives - federal, state, local

Federal: The Child Nutrition and WIC Reauthorization Act of 2004 (Public Law 108-265) required school districts nationwide to develop local wellness policies. Congress directed the Centers for Disease Control and Prevention (CDC) and the Institute of Medicine (IOM) to recommend appropriate nutritional standards for the availability, sale, content, and consumption of foods at school, with a special focus on competitive foods. These recommendations are published in *Nutrition Standards For Foods in Schools: Leading the Way Toward Healthier Youth*.[5] The report organizes foods and beverages offered outside of the school lunch program into two tiers according to their consistency with the *Dietary Guidelines for Americans*, and makes recommendations regarding their availability in schools.

Washington: Washington State Senate Bill 5436 required school boards to adopt nutrition and physical fitness policies by August 1, 2005. Washington State Senate Bill 5093, passed in March 2007, encourages school districts to provide only healthy food and beverages during school hours or for school sponsored activities, and to develop school health advisory committees.

Local School Districts: Guidelines and resources for developing policies are available on the Healthy Schools, Successful Students Web site at www.healthyschoolswa.org. The Web site also includes nutrition and physical activity policies from Washington's school districts.

Examples of school district policies

The Seattle School Board approved a comprehensive set of nutrition-related policies designed to provide students with healthy food and beverage choices during the school day. The policies ban sales of all foods containing high levels of sugar and fat, improve the quality and appeal of school meal programs, and prohibit contracts with beverage vendors for "exclusive pouring rights," as part of an anti-commercialism policy. These policies are considered to be among the strongest in the country.

The Toppenish School District policies are designed to provide healthy choices at school that are consistent with nutrition education messages, and to maximize participation in the school meal program. They clearly define portion size limits and maximum levels of total fat, saturated fat and sugar for competitive foods and beverages. These guidelines cover food available during school hours and during regularly scheduled afterschool programs. The policies apply to foods and beverages that are offered or sold from all venues including vending machines, student stores, parent groups, booster clubs, associated student body groups, and a la carte sales in the lunchroom by teachers in class or by others.

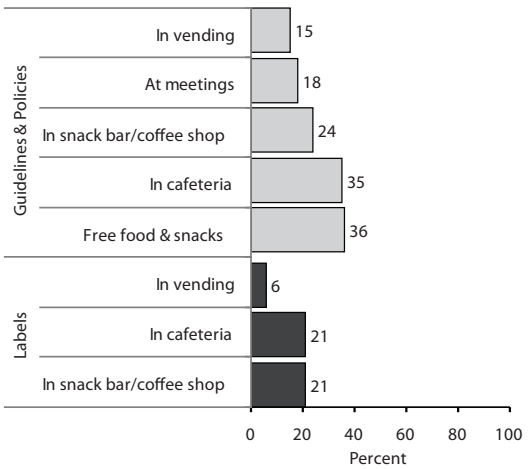
The Spokane School District policies apply strict portion-size, calorie and nutrient standards to all food and beverages sold, served or offered from all sources on school property before and during the school day. Competitive foods from any venue are limited to 250 calories and nine grams of fat per portion (except seeds and nuts). The district has phased out deep fat frying, promotes side salads as options to potato products and limits cookies and dessert options to two days per week. The district also requires trans-fat label information for all menu items.

Support Farm to School programs in local schools.

Farm to School programs that promote the use of local produce in school cafeterias offer benefits to children, schools, communities, and farmers:[7]

- School cafeterias serve healthy meals.
- Student nutrition is improved.
- Children learn where their food comes from and how their choices affect their own health and the viability of local farms.
- Community food systems grow and prosper.
- Local farmers have more markets for their products.

Healthy Foods Policies and Practices in Washington Worksites, 2006



About a third of Washington buisinesses have healthy foods policies for their cafeterias or snack bar/coffee shops. Fewer have policies at meetings or in vending. Labelling healthy foods is rare, especially in vending machines.

Policy changes may be needed to facilitate Farm to School programs. Some schools need to upgrade their kitchens to be able to prepare and serve fresh local food, and some districts need to change food procurement guidelines and practices to encourage local buying. Many school districts adopt curricula that link farm food, school gardens and nutrition education.[8]

The Olympia School District piloted "Organic Choices," a salad bar featuring local organic fruit and vegetables, in October 2002 at Lincoln Elementary School. To address the extra cost, desserts were eliminated and replaced with additional fresh fruits and vegetables and the district switched from plastic disposable eating utensils to reusable silverware. Additional schools have added organic salad bars, and efforts have expanded to incorporate local organic produce from several farms into the school lunch program throughout the district. In the Olympia School District, lunch participation rates have increased at Lincoln Elementary School, and fruit and vegetable servings have increased at both Lincoln and Pioneer schools.

Increase access to healthy foods on college and university campuses.

The Washington State University (WSU) Organic Farm sells produce to the WSU Hospitality School for special catered events. The chef uses and promotes locally produced, organic products. The farm also sells its produce to WSU students and staff at a weekly farm stand. The Evergreen State College manages a 3-acre organic farm on campus. During the growing season, produce is sold at a farm-stand on campus, through community supported agriculture subscriptions, and to the campus food service. Annual sales total about $25,000. Excess produce is donated to the Thurston County Food Bank and local charities, or composted. Proceeds from sales help finance farm operations, projects, and purchase of seeds and equipment.[9]

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Nutrition Objective 1: Increase Access to Health-Promoting Foods

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NUTRITION OBJECTIVE 2:

Reduce food insecurity in Washington

Food security means having enough food at all times to meet basic needs for an active healthy life. To be food-secure, a family or individual needs to be able to get acceptable foods in socially acceptable ways.[1] Food insecurity occurs when families cannot afford to buy healthy foods. Efforts to improve hunger and food insecurity in Washington over the past few years have had positive effects. Washington went from eighth hungriest state in the nation in 1996-1998 to 25th in 2004-2006.[2] Food insecurity declined almost 3 percent from an average of 13 percent in 1996-1998 to an average of 10 percent in 2004-2006. Even so, more than 257,000 households in our state are food insecure. Whenever families are uncertain about their ability to obtain enough healthy food, they experience food insecurity.

Families and Individuals

To be food secure, families and individuals need:[1,3]

- Enough money to buy healthy foods.
- Protection from unaffordable health care costs.
- Affordable housing that includes facilities for storing and preparing foods.
- Transportation to stores that sell moderately priced healthy foods.
- Reliable access to socially acceptable food assistance programs as a safety net against hunger.
- Institutional and personal social systems to support families faced with unanticipated barriers to buy enough healthy food.

Compared to children from families who are food secure, children from families with food insecurity are more likely to have behavior problems, do poorly in school, need medical care and hospitalization, and to develop chronic diseases.[4,5] Pregnant women who do not have enough to eat during pregnancy are more likely to deliver low birth weight babies. For older adults, food insecurity can make chronic disease harder to control and speed the onset of health problems that are common with aging.[6]

Food insecurity may also be associated with poor quality diet and obesity.[7] When money and resources for food are stretched, low-income families and individuals may purchase cheap foods that are high in fat, sugar, and calories. Obesity may also be a response to uncertain supplies of food. When money or resources are available for food, family members may overeat to compensate for times when they didn't have any food.[8]

These consequences of food insecurity are expensive. In 2007, it was estimated that food insecurity in the United States cost households, communities, businesses and government a total of $90 billion per year.[9]

Priority Recommendation A:

Strengthen food assistance programs and improve economic security for low-income families and individuals.

At the national level, the United States Department of Agriculture funds several nutritional assistance programs:

- Special Supplemental Nutrition Program for Women Infants and Children (WIC); WIC Farmers Market Nutrition Program.
- Senior Nutrition Program; Senior Farmers Market Nutrition Program.
- Food Stamp Program (known in Washington as the Basic Food Program).
- National School Lunch Program; School Breakfast Program; Summer Food Service Program.
- Child and Adult Care Food Program.
- Emergency Food Assistance Program.
- Cooperative State Research, Education, and Extension Service.

These programs are effective. The WIC Program reduces anemia in children and increases intakes of iron, vitamin B6 and folate, and children who participate in the National School Lunch Program have higher intakes of several key nutrients compared to non-participants.[1] When students participate in the School Breakfast Program test scores, cognitive ability and memory improve and tardiness and absenteeism rates decline.[2] Low-income children who participate in food assistance programs may be less likely to be overweight than low-income children who do not participate in assistance programs.[3]

Key Points

- Families become food insecure for different reasons.
- Many working families are food insecure.
- Children and seniors are particularly vulnerable.
- Women without sufficient finances are more likely to be overweight.
- Emergency food resources are not the (best) answer to food insecurity.
- States with strong social and medical systems for families have lower rates of food insecurity.

While food assistance programs are critical to reducing food insecurity, it is also imperative that the fundamental cause of hunger – poverty – is addressed. In 2006, 8 percent of Washington's population (502,000 individuals) lived below the federal poverty level.[4] Poor working families struggle to make ends meet while the costs of housing, health care, education, and child care continue to rise. Unfortunately, having a job doesn't guarantee that a family will be self-sufficient. In Washington, about one in five working families does not make enough to meet their basic needs.[4]

The emergency food system of food banks and meal programs for the homeless is not a long term solution to the problem of food insecurity, but it provides a necessary safety net for those who find themselves with immediate needs for food. The food that is donated to emergency feeding programs is often high in fats and sugars and low in vitamins and minerals. Groups like Rotary First Harvest are dedicated to increasing healthy options within the emergency food system. Anti-hunger groups work to improve the distribution of healthy donated food, secure funding for refrigeration at food banks, and educate donors, volunteers and participants about the importance of nutritious foods. The federal Emergency Food Assistance Program provides funding to food banks and meal programs statewide.

Examples of activities:

Increase funding for food assistance programs.

The majority of funding for food assistance programs comes from the federal government. However, this funding is often not enough to ensure that all eligible families and individuals can participate and that programs such as the School Breakfast Program can be financially viable for those entities operating the programs. In 1993, the Washington State Legislature created a pool of funds to supplement the federal reimbursement rate for free and reduced-price school breakfasts, but over time fewer resources became available to local schools and new districts were reluctant to start breakfast programs. Washington's school districts lost close to $20 million in 2005-2006 operating the School Breakfast and National School Lunch Programs.[5] In 2006 the Washington legislature voted to provide $1 million to bring the school breakfast reimbursement rate up to 15 cents per meal. While additional funding may still be needed to protect districts from losing money, the increase in the reimbursement rate serves as an incentive to districts to continue to provide school breakfast.

Increase wages for low-income workers.

Meeting the most basic needs is difficult for many low-income families and individuals. The high cost of living, coupled with rising health insurance costs, forces many Washington residents to live paycheck to paycheck. An accident or illness, the loss of a job, or an unexpected housing or care expense can be devastating. Some families and individuals have to make the choice between paying their heating bill and buying medicine. Food assistance programs, Earned Income Tax Credit, the Child Tax Credit, job opportunities that offer a living wage, and access to affordable housing, health care, and child care can play a critical role in lifting people out of poverty.

The Northwest Federation of Community Organizations defines a living wage job as a job that "allows a family or individual to meet their basic needs without relying on public assistance."[6] According to the 2007 Northwest Job Gap Study, 30 percent of job openings in Washington pay less than a living wage ($11.16 an hour) for a single adult and as much as 77 percent pay less than the living wage ($23.39 an hour) for a single adult with two children.[6] Washington State's Opportunity Grants legislation[7] provides financial assistance and support services to help people with low income receive a post-secondary education – an important step toward moving workers into living wage jobs.[8]

Priority Recommendation B:

Improve access to and awareness of food assistance programs.

Not all families and individuals who are eligible to participate in food assistance programs actually receive benefits. In Washington, only 68 percent of people who are eligible for the Basic Food Program (food stamps) participate in the program,[1] and only 12 percent of children eligible for free or reduced price school meals receive free meals through the Summer Food Service Program.[2] There are many reasons that eligible families and individuals might not participate in food assistance programs. To begin with, programs need to be available in local communities, and program location and hours of operation must meet the needs of working families. In addition, families need to be aware of programs and to have accurate information about program benefits, eligibility guidelines and how to apply.

Cultural Competence

In communities where families speak languages other than English, eligible households may not participate in food assistance programs because of lack of knowledge about the program, administrative burden, and fear that receiving benefits may affect immigration status.

Cultural Competence

A broad-based partnership in Washington including the Children's Alliance, the Economic Services Administration of the Department of Health and Human Services, Washington State University Area Health Education Center, VOICES, Within Reach, the Bill & Melinda Gates Foundation and the Medina Foundation is working to overcome barriers to participation in food assistance programs. Community change is built on information from program participants or individuals who have applied and are not currently receiving assistance. Local leadership teams comprised of Community Service Office staff, advocates, community-based agencies and Basic Food Program Outreach contractors use this information to develop collaborative strategies that are specific to each site. The initiative links policy change, outreach strategies and changes to local office operations.

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Examples of activities:

Expand access to food assistance programs.

Children in families with incomes below 130 percent of the federal poverty level are eligible to receive free school meals. School districts may charge a co-pay for children in families with incomes between 130 percent and 185 percent of the federal poverty level. Eliminating that co-pay can greatly increase participation in school meal programs. Washington became the first state in the nation to eliminate a 30-cent co-pay for school breakfast in 2006. As a result, participation in the School Breakfast Program in Washington increased by 26 percent or 780,000 meals.[3]

Expand outreach efforts to connect low-income families and individuals to food assistance programs.

Navigating the food assistance system can be daunting, and finding information on all the available resources and application procedures can be a challenge. Most food assistance programs have different eligibility guidelines and separate applications. Families and individuals may have to make several appointments or travel to several locations to apply for and/or receive benefits. Even when eligible families and individuals receive the maximum amount of food assistance benefits, they still may have trouble putting enough food on the table.

To help families and individuals connect to existing food and health insurance programs, WithinReach launched ParentHelp123.[4] At the ParentHelp123 Web site, Washington families can screen themselves for potential eligibility for state and federal food and health insurance programs, and complete and print program applications. They can also search by zip code for local resources such as food banks, summer meal programs, breastfeeding support, and services for children with special needs.

Increase awareness of and referrals to food assistance programs through healthcare settings.

Food insecurity leads to poor health. Physicians, dietitians, dentists, nurses and other health professionals can include routine assessment of food security status as a standard part of medical care, and clinics and practices can improve the health of their patients by establishing referral systems for food assistance programs.[5] Health and social service professionals statewide can contact the Family Food Hotline, a program information and referral hotline, to connect their clients with available food resources.[6] More than 300 families who called the hotline in 2006 reported that they learned about the service from a social or health care professional.

Clients who visit the Columbia Valley Community Health WIC Program in Chelan are routinely asked about food security. Clients who are food insecure are referred to local food banks, encouraged to apply for food stamps, and receive assistance in filling-out a food stamps application. Low-income families are more likely to use the Basic Food Program when they can get information in their native language, talk to someone about eligibility requirements before the application, and have help organizing the necessary documents.

Children, pregnant women and seniors are especially vulnerable to food insecurity, and the consequences are long-lasting and expensive. Working families find themselves without enough food for a number of reasons, and many times the situation is beyond their control. Food insecurity rates can be improved. States that have strong social and medical support systems have lower rates of food insecurity.

National Anti-Hunger Organizations, a group of 13 associations, developed *A Blueprint to End Hunger*[10] that recommends:

- Expanded outreach especially to underserved populations, such a working-poor households, children and the elderly.
- Investments in public education to increase awareness of the importance of preventing hunger and improving nutrition for health, learning, and productivity.
- Communicating about food insecurity.

Communication

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- Investments in public education to increase awareness of the importance of preventing hunger and improving nutrition for health, learning and productivity.
- Communicating about food insecurity.
- Children, pregnant women and seniors are especially vulnerable to food insecurity, and the consequences are long-lasting and expensive.
- Working families find themselves without enough food for a number of reasons, many times the situation is beyond their control.
- Food insecurity rates can be improved; states that have strong social and medical support systems have lower rates of food insecurity.

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NUTRITION OBJECTIVE 3:

Increase the proportion of mothers who breastfeed their infants and toddlers

In 2005, most new mothers in Washington said they began breastfeeding their infants at birth, but only 75 percent of these mothers were still breastfeeding two months later.

Human milk provides the best nutrition for infants and children.[1,2] Breastfed children are healthier, incur fewer health care costs, and are less likely to experience obesity and chronic diseases when they are older.[3,4] If 75 percent of infants were breastfed early in life and 50 percent were still breastfed at six months, as recommended by the U.S. Surgeon General, it would save an estimated $3.6 billion in health care costs.[5] Breastfeeding avoids the financial and environmental costs associated with the manufacture and transportation of formula and disposal of formula containers.

Families and Individuals

Almost all mothers would breastfeed if they understand how breastfeeding works and are confident that they can provide the milk their baby needs. Early breastfeeding experiences are very important. When babies nurse frequently, mothers will produce enough milk. The key components of breastfeeding success recommended by national professional health organizations are as follows.[1,2,3,4]

Knowledge, Preparation and Planning

- Mothers are more likely to breastfeed when health professionals recommend breastfeeding.
- Families can learn about breastfeeding and make plans to have access to professional help if they need it to get breastfeeding off to a good start.
- Milk supply will decrease if the infant and mother go too long between feedings; families can plan ahead for times when mothers and babies will be apart or will need a clean and comfortable place to nurse away from home.

Support

- Delays in early breastfeeding can lead to ongoing problems; mothers and babies need breastfeeding support at birth.
- Active support and encouragement from fathers and other family members leads to better breastfeeding.
- The materials produced by formula companies and formula sample packs undermine a woman's confidence in her ability to breastfeed.

Priority Recommendation:

Assure that health care settings, child care facilities, and worksite environments support breastfeeding.

It is easier to breastfeed when healthcare systems, worksites, families, and communities create breastfeeding-friendly environments. Breastfeeding promotion starts before birth and is supported by hospital practices that encourage breastfeeding over formula feeding unless medically indicated.[6,7] More than 70 percent of mothers with children younger than three years, work full time.[8] A supportive work environment that promotes maternal and child health reduces staff turnover and absenteeism, and improves productivity and loyalty.[6]

Examples of activities:

Cover breastfeeding-related supplies and services through private and state funded health insurance.

Insurance coverage for lactation services increases the number of women who breastfeed and the length of time they breastfeed.[9] In Washington, Medicaid covers lactation services and electric breast pumps only when medically indicated, not necessarily when returning to work.

Establish hospital and maternity center practices that promote breastfeeding.

Established hospital policies make it easier for new mothers to choose breastfeeding and have a strong impact on long-term breastfeeding success.[3] As recommended in the Blueprint for Action on Breastfeeding[6] and the CDC Guide to Breastfeeding Interventions,[7] the Seattle-King County Breastfeeding Coalition developed model breastfeeding standards for King County hospitals in 1996.[10] These standards are consistent with policies and procedures outlined in the Baby-Friendly Hospital Initiative established by UNICEF and the World Health Organization, an initiative which recognizes hospitals and birth centers that provide an optimal environment for the promotion, protection and support of breastfeeding.[11] Evergreen Hospital Medical Center in Kirkland was the first hospital in the United States to be designated a Baby-Friendly

Most Washington businesses employ women of childbearing age. Though only 13 percent have a written policy to support breastfeeding, 31percent report having a dedicated area that women can use for breastfeeding or pumping milk.

Cultural Competence

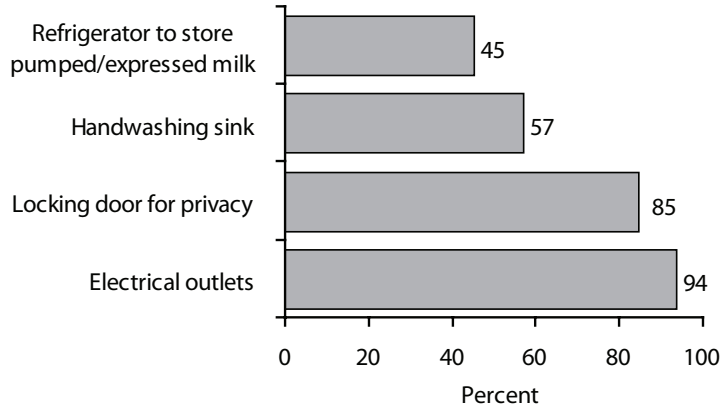
Harborview Medical Center in Seattle supports breastfeeding in a multi-ethnic population through:

- Learning about and respecting the cultural meanings of breastfeeding.
- Training health care providers and staff to support breastfeeding in culturally responsive and effective ways.
- Promoting breastfeeding through classes and materials in many languages and using pictures that reflect the diversity of the families served at Harborview.

Hospital by this international health program.[12] Other Baby-Friendly hospitals in Washington include Okanogan-Douglas District Hospital in Brewster, St. Mary's Medical in Walla Walla, and Tacoma General in Tacoma.[13]

In line with the "International Code of Marketing of Breast-milk Substitutes,"[14] the "Ban the Bags" national campaign was started in 2006.[15] The campaign was started to stop formula company marketing in maternity hospitals. Specifically, the campaign advocates against providing formula sample packs and promotional items to new families at discharge. All of Washington's Baby Friendly hospitals and many other hospitals such as Legacy Salmon Creek Hospital in Vancouver are "bag-free."

Lactation Room Amenities, Washington Worksites 2005



Most Washington businesses have some onsite ammenties to support breastfeeding. But less than half have refrigerators to store breast milk.

Train health care professionals.

The American Academy of Pediatrics, Health and Human Services Blueprint for Action on Breastfeeding, and the CDC Guide to Breastfeeding Interventions recommend enhanced training for physicians and other health care providers. In 2003, WithinReach, the Breastfeeding Coalition of Washington and Public Health-Seattle & King County's WIC Program established the Physician Lactation Education Collaborative.[16] The collaborative provides culturally competent, evidence-based research, education, and support to health care providers and encourages them to adopt policies that support breastfeeding.

Develop policies and incentive programs that encourage employers to provide breastfeeding-friendly worksites.

As described in the CDC Guide to Breastfeeding Interventions,[7] extended maternity leave supports both breastfeeding initiation and duration rates. In April 2007, Washington became the second state in the nation to ensure paid family leave for all parents caring for a newborn or newly adopted child. The new family leave program described in Senate Bill (SB) 5659 goes into effect October 2009.[17]

For breastfeeding mothers returning to work, a 2001 Washington law "exempts the act of breastfeeding or expressing breast milk from the indecent exposure laws"[18] and encourages employers to accommodate breastfeeding mothers.[19] Several employers in Washington were recognized by the Breastfeeding Coalition of Washington for their leadership and contribution to promoting and supporting breastfeeding as a vital part of the health and development of children and their families. In 2007, the award was presented to Blue Bird, Inc., a co-operative fruit packing company in central Washington that

employs approximately 1,600 seasonal employees in their packing houses, orchards, and offices. Blue Bird provides two comfortable private rooms with refrigerators and electric breast pumps, and allows employees to flex their hours to ensure adequate time to express breastmilk during working hours. All Blue Bird employees, including upper management, have received information and training about breastfeeding at work.[16]

Develop policies that require child care facilities to provide quality breastfeeding support.

Child care centers can help increase breastfeeding rates by supporting breastfeeding mothers.[6] Centers can provide safe storage facilities and procedures for using expressed breastmilk. They can respect a mother's instructions about feedings, and provide a quiet and comfortable place for mothers to breastfeed on-site. The on-site child care facilities at Northwest Hospital and Medical Center[20] in Seattle and ICOS Corporation[21] in Bothell have an "open door policy" to encourage employees to breastfeed or play with their child during work breaks. Child care providers call mothers when their child is hungry and have facilities to hold and thaw breastmilk. The on-site child care facility at Northwest Hospital also has a comfortable sitting area for mothers to nurse or pump.

Establish policies to support breastfeeding-friendly communities.

The CDC Guide to Interventions encourages public acceptance of breastfeeding. In 2006, the Moses Lake City Council adopted a resolution encouraging the community to recognize the benefits of breastfeeding and support a breastfeeding mother's right to breastfeed her baby anywhere. The Moses Lake Breastfeeding Coalition is bringing awareness to the resolution through outreach to local businesses and to WIC and Head Start to reach breastfeeding mothers. The coalition also offers assistance to businesses that want to become more breastfeeding-friendly.[22]

Communication

This symbol can be used instead of pictures of a baby bottle to designate baby friendly places. The image is available copyright free: www.breastfeedingsymbol.org.

The Breastfeeding Coalition of Washington State (BCW) Web site has information about breastfeeding, resources, and links. (www.breastfeedingwa.org/aboutbreastfeeding). WithinReach has a toll-free hotline to answer questions about breastfeeding, available online at Parent Help 123 (www.parenthelp123.org/infants/breastfeeding)

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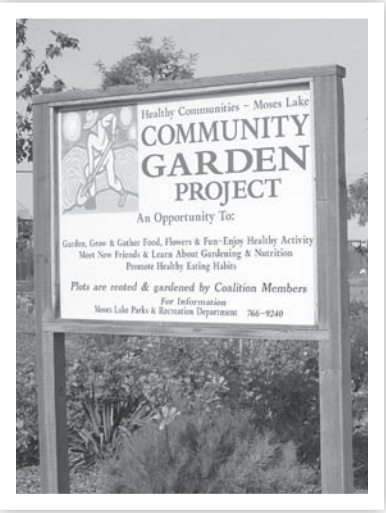


PHYSICAL ACTIVITY

OBJECTIVES

PHYSICAL ACTIVITY OBJECTIVE 1:

Increase the number of people who have access to free or low cost recreational opportunities for physical activity

People who are physically active benefit from a sense of well-being that comes from physical fitness and an enhanced ability to cope with the stresses of daily life.[1,2] Compared to their sedentary neighbors, people who are active are more likely to maintain a healthy weight and less likely to develop chronic diseases.[2,3,4,5]

Families and Individuals

The most important thing that most Washington residents can do to maintain a healthy weight is to be active. At a minimum, adults need 30 minutes of moderate physical activity five or more days per week or 20 minutes of vigorous physical activity three or more days per week.[6] Longer and more frequent physical activity leads to even better health. For weight loss and maintaining weight loss, 40 to 90 minutes of daily activity may be needed.[3] Many people want to be active, but the demands of work and family life, limited financial resources and other barriers may interfere with good intentions to live a healthier lifestyle. There are ways to work through some of the issues associated with physical activity.[7]

In 2005, about two-thirds of Washington adults were physically active at the recommended level.

Time

Physical activity can be done in small sessions throughout the day. Walking for just ten minutes, three times a day meets the recommendations.

Key Points

- Everybody can benefit from physical activity.
- Just 10 minutes of physical activity three times a day makes a difference for fitness and health.
- It's easier to be active when worksite policies and environments promote activity.
- Low-income residents are less likely to have access to facilities for physical activity; low-cost facilities in low-income neighborhoods could make a real difference.

Motivation

Many people find that social support makes a big difference. Walking partners, low cost group activities, and family outings all encourage activity.

Enjoyment

Most people can find something they enjoy; physical activity opportunities range from skate parks for youth to water aerobics for older adults. Programs like Washington Health Foundation's Governor's Health Bowl build in friendly competition and rewards for physical activity.

Convenience

Adults are more likely to be active when safe, friendly, and affordable facilities are close to home or work. Flexible work schedules make it easier to fit physical activity into daily life.

Disability

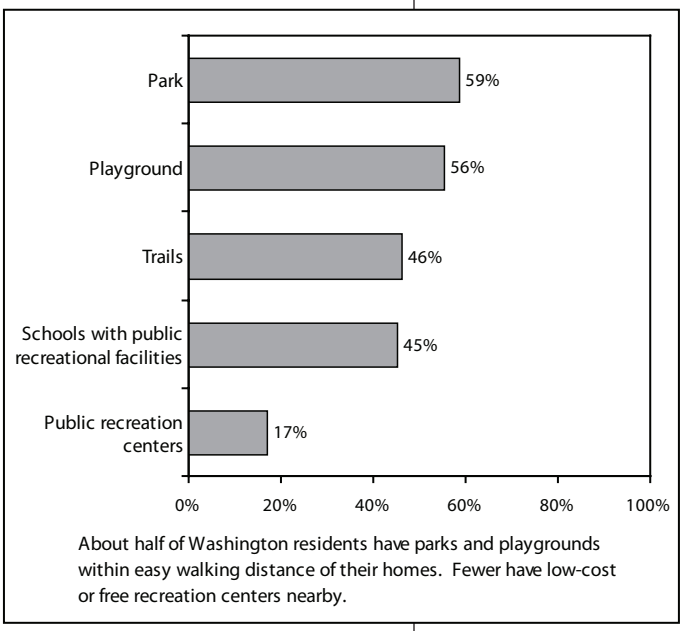
Physical activity is part of a healthy life for everybody. There are individualized planning tools and links to a wide variety of assistive devices and programs on the Web site of the National Center on Physical Activity and Disability (www.ncpad.org).

Making it Easier to be Physically Active

Washington has beautiful parks and natural places for outdoor activities. However, Washington residents are more likely to choose recreational activities that are low cost and close to home.[8] Living within one mile of recreational facilities increases the likeliness of regularly getting exercise.[9] In every community there are opportunities to create or enhance facilities for physical activity in public places like schools, community centers, malls and parks. Free or reduced cost opportunities will encourage residents who are the least likely to be active to take advantage of these resources.

Residents who walk and bicycle for recreation often use streets and roads. Safety is one of the most important attributes of a recreational setting,[10] and motor vehicle traffic can be an intimidating and real threat to pedestrian and bicycle safety. Local trails and paths separated from traffic are safer than streets and roads.

Washington Adults With Recreation Destinations Within a 10-minute Walk of Their Homes, 2005



About half of Washington residents have parks and playgrounds within easy walking distance of their homes. Fewer have low-cost or free recreation centers nearby.

Priority Recommendation A:

Provide adequate funding for state and local recreational sites and facilities.

Parks and open spaces create a high quality of life that attracts tax-paying businesses and residents to communities. Both state and local policy makers make it easier to be healthy by prioritizing activities that promote active movement and minimize carbon emissions.

Investing in parks and facilities can revitalize urban areas, boost tourism, and safeguard the environment. But opportunities to purchase land for new trails, paths and parks are lost when local agencies are forced to cut budgets.[1] In Washington, the numbers of funded paths and trails projects are small in comparison to actual requests for trail and path funding.[2]

Our state has one of the largest and most heavily used state park systems in the United States. With 120 parks, Washington ranks fourth among all 50 states in day-use attendance. However, Washington ranks 44th in state dollars spent per park visitor. This equates to $1.13 per visitor compared to a nationwide average of $4.94 per visitor.[2] As charges for use of these parks rise, they become less and less available to low-income families.

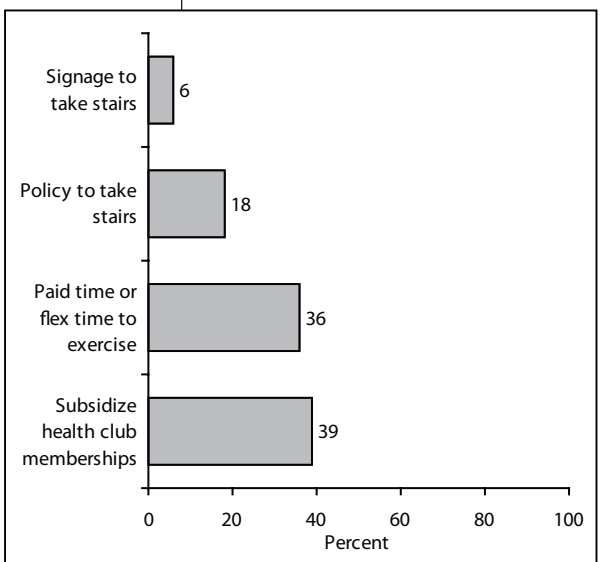
Examples of activities:

Support local and city parks and recreation facilities that provide low-cost, high-demand activities and are used by disadvantaged populations.

Low-income populations, those with disabilities, and those with mobility limitations are least likely to have access to facilities for physical activity.[3,4] A collaborative approach to planning, funding, construction, and management is a critical first step in securing funds to build an infrastructure for recreational opportunities for residents in underserved areas.[3] State funders can promote local partnerships by requiring collaboration for grant applications for funding of recreation facilities.

Even when facilities are located near residents, it may be hard for some people to afford to use them. Local governments can use sliding fee scales or other systems to address disparities. Renton Parks and Recreation offers the "Adopt-a-Participant" program. Through this program, individuals can make a donation that provides registration fees for low-income children and seniors or that covers the cost of enrolling one participant

Physical Activity Policies and Practices, Washington Worksites, 2006



While about a third of Washington businesses offer paid time to exercise or subsidized health club memberships, very few have policies and/or signage encouraging stair use at work.

in an athletic program or camp. Through its "Care to Share" program, Pullman Parks and Recreation encourages program participation by low-income youth up to age 17 years, by offering reduced fees.

Everybody benefits from physical activity. Through its Access to Recreation Program, Vancouver Parks and Recreation provides the opportunity for people with disabilities to participate in special activities such as dancing, wellness walks, horseback riding and bowling. Nautilus, Inc. in Vancouver created outdoor recreational facilities open to the public for use at no cost. The facilities include an all weather football field, soccer field, softball, basketball and track. The Nautilus motto is "our backyard is your backyard."

Provide funding to maintain established local and city parks and recreational facilities, especially trails and paths for walking and bicycling.

Once they are built, trails and paths require funding for ongoing maintenance to ensure safety and encourage their use. Parks and other recreational sites are a matter of public health and should be funded accordingly.[3,5] When they are not sufficiently funded facilities will deteriorate. Parks and cities use volunteers to maintain trails, but these programs still require funding to organize workers and assure that safety standards are maintained. Washington State Parks volunteer program provides opportunities to participate in annual maintenance events, litter patrols and friends of the park associations. Mount Vernon and Moses Lake and many other cities have similar programs.

Support land acquisition and construction of new trails and paths for walking and bicycling.

There are several mechanisms that can be used to acquire access to land for physical activity. These are illustrated by the success of the Mountains to Sound Greenway Trust that includes more than 700,000 acres and provides protective right of way for trails from Puget Sound to central Washington.[6] The land is held by several entities – cities, counties, commercial enterprises and private groups, and was acquired through variety of mechanisms that include purchase, trade, donation, and conservation easements from counties and cities.

Similar projects are underway across the state. In Pierce County, the Foothills Rails-to-Trails Coalition and Forever Green Council in Pierce County are developing the Foothills Trail, a long-term rails-to-trails project that envisions connecting Mount Rainier National Park to Tacoma and across the Narrows Bridge to Gig Harbor. Anacortes Parks and Recreation Department converted a former rail corridor to a 3.3 mile paved waterfront trail. The Tommy Thompson trail provides recreational and commuting cyclists and pedestrians a means to enjoy the shore of Fidalgo Bay while providing an alternate to SR 20 for cyclists

traveling to the Anacortes ferry terminal. The Active Community Task Force works with partners to link the Fidalgo Island trail system with the growing network of trails in greater Skagit County.

In urban areas both new development and redevelopment offer opportunities to create public recreational spaces. The HOPE VI redevelopment project in High Point area of Seattle is creating neighborhood and pocket parks with a goal of one park per block. In Anacortes and Lacey, developers are required to provide land for neighborhood parks, pocket parks, or open space or to provide fees to the city.

Priority Recommendation B:

Develop model policies to increase access to public facilities for physical activity.

The Centers for Disease Control and Prevention strongly recommend creating or enhancing access to public places for physical activity.[1] Schools, community recreation centers, malls and parks are community assets that can be used as places for physical activity. Concerns about safety and access before or after hours of usual operation can be addressed in part by policy changes.[2] By removing financial barriers all community members and families will have access to such facilities for recreation and play.

Examples of activities:

Open public school gym facilities and athletic grounds for the public; address policies related to liability issues regarding the use of public spaces for recreational purposes.

The cities of Shoreline, Seattle and Sunnyside have formal agreements with their school districts to assure the best use of public facilities for the community and enhance programs of community recreation.[3,4] Seattle Parks and Recreation and the Seattle School District recognize that they have "mutual interests in helping young people learn and develop recreation skills and in providing opportunities for people of all ages to participate in recreation activities." The agreements outline plans for priorities, scheduling, staffing, fees, dispute resolution, training, maintenance, operation, improvements and liability. They address use of athletic complexes, gymnasiums and pools. In Shoreline the school district and the city agree to maintain an insurance policy to cover liability issues and to indemnify and hold each other harmless against any claims, suits, actions or liabilities.[4]

The cities of Pasco and Renton cooperate with their school districts for joint development of land and facilities. In Pasco, the land use policy directs the city and school district to jointly develop and operate school playground/park facilities in order to economically meet needs for neighborhood parks and improve school facilities.[5] In Renton, the city and the school district are instructed by land use policy to jointly develop multiple use facilities such as playgrounds and sports fields whenever practical, and encourage community use of school sites and facilities for non-school activities.[6]

Make creative use of space for parks and recreation based on community needs and interests. Washington's assets of water, mountains and forward-thinking towns and cities provide unique opportunities for physical activity. At the Seattle Center, the International Fountain was replaced and expanded to make it safer and more enjoyable for children to play in. The hard iron nozzles and surrounding sharp-edged rocks were replaced, and now children actively play in the fountain bowl and venture up to the silver dome. The Park and Recreation Department in Moses Lake, with help from Basic American Foods, provides guides to boat launch sites, scenic loops and flora and fauna along the new Moses Lake Water Trail. At Marymoor Park in Redmond, park visitors enjoy the use of a climbing wall with routes for all abilities. In 77 Washington cities, from Aberdeen to Yelm, skate parks encourage physical activity.

Priority Recommendation C:

Increase the number of worksites, including healthcare and school settings, that have policies to enhance physical activity opportunities.

In 2006, 63 percent of all civilian, non-institutionalized Americans over the age of 16 worked at some time during the year.[1] Commute times in Washington continue to grow, and many adults have caretaking responsibilities for children and other family members that limit physical activity opportunities. Lack of time and access are major barriers to physical activity.[2] Worksites and worksite policies can have a profound impact on physical activity. Worksite "exercise" programs typically attract a limited number of participants and often have high dropout rates over time.[3] However, long term success can be achieved by modifying the total work environment and adopting corporate strategies that support more active lifestyles for all employees.[4]

Examples of activities:

Provide employee benefit packages that include coverage for physical activity.

Physical activity enhances wellness and worker productivity.[3] Several Washington employers recognize the economic benefits of active employees and encourage physical activity through their benefits plans. The worksite wellness program for Spokane city employees includes a fee waiver and a discounted membership to a local gym. Hollister-Stier Laboratories in Spokane increases health club reimbursement for employees who work out eight or more times in a month, and Providence Mount Saint Vincent in Seattle provides fitness center discounts and reimburses employees who walk to work. Sysco Food Services Company offers fresh fruit to employees who work out during lunch or work hours.

Offer lower insurance premiums or rebates for employees who can document participation in regular physical activity.

This policy is recommended in Promoting Physical Activity: A Guide for Community Action,[5] and builds on the success of similar efforts that have worked in tobacco control. Regular physical activity is associated with lower health care costs even over a relatively short period of 18 months.[6] Hollister-Stier Laboratories in Spokane offers a 10-percent discount on medical premiums to employees who lower their risk levels as defined in their wellness program "My Life."

Provide worksite facilities and flex time to allow for physical activity before or during the workday.

Worksite facilities can foster sustainable behavior change.[7] Increasing numbers of employers in Washington provide facilities that encourage physical activity as part of commute trip reduction or during the work day.

At REI corporate headquarters, employees have access to showers, lockers and bicycle hangers. Each day, group bike rides take place at lunch time and on Friday –"jump in day"- new cyclists are encouraged to participate in the group rides. For a small monthly fee, employees can use a van pool program that uses vehicles with bike racks and serves a wide geographic area. Flexibility is allowed in work schedules to encourage physical activity before, during and after work. WRQ, an Internet information management company based in Seattle, offers kayak dock space for water-based commuters.[8]

Washington's worksites offer bike racks, gyms, yoga classes, sports teams, fitness centers, and interactive tools for monitoring physical activity. Wizards of the Coast, an adventure game company in Renton, offers an on-site dojo to practice active self defense.[9]

Communications Signs and Symbols

Trailhead information

This symbol for trails was developed by the National Park Service for Mount Vernon urban trails to use on their urban trails map. It signifies a kiosk location where additional information is available to trail users.

Statewide Campaigns

The Washington Health Foundation sponsors the Governor's Health Bowl, an annual competition that offers a fun opportunity for individual champions, organizations and schools involved in the Healthiest State in the Nation Campaign to build challenges around fitness and knowledge about our state's health.

Cultural Competence

Local governments should collaborate with low-income, disabled, and diverse community representatives when recreation facilities are planned, sited, constructed and managed.

Ethnically Diverse Walking Groups

Walking is the most common form of physical activity for older adults. Many seniors enjoy the feeling of safety and camaraderie that comes with walking with a group in their own neighborhood. The Sound Steps program includes weekly organized walks, walking logs, incentives and celebrations for groups of people aged 50 and older. Participants report increased physical activity, health improvements, and enhanced sense of community. Groups that walk in the ethnically diverse communities of south Seattle express pride in doing something positive and "reclaiming" the neighborhood.

Hispanic Families

In focus groups Mexican American adults say that family-based physical activity is important. Focus group participants encourage approaches that emphasize the health of the whole family. Instead of individual "exercise" programs for women, facilities can develop activities that attract mothers, fathers, children and youth.

Batdorf and Bronson Coffee Roasters in Olympia encourages employees to use bicycles for business travel between the roastery and stores. The company provides bikes, helmets, and bike locks for employees to use at work and for physical activity during breaks.

Everett's Eisenhower Middle School, under the leadership of principal David Jones, began their Coordinated School Health approach by focusing on staff wellness, specifically nutrition and physical activity. They formed a School Health Council to promote a healthy school and partnered with the American Cancer Society who helped plan and implement a wellness program, Active For Life. The program provided health and nutrition education, incentives and reminders that staff are role models for students. The program also tracks combined weight loss and encourages staff to exercise at school along side students.

Provide point-of-decision prompts to encourage people to use the stairs.

Many people will take the stairs when they are reminded of the health benefits of increased activity throughout the day.[10] At the Wenatchee Valley Medical Center, high school and college students created a stairwell mural that continues for three floors and depicts colorful landscapes and ways to be active. Evergreen Healthcare and partners have created posters that say, "Raise your fitness level, one step at a time. ***Take the Stairs!***

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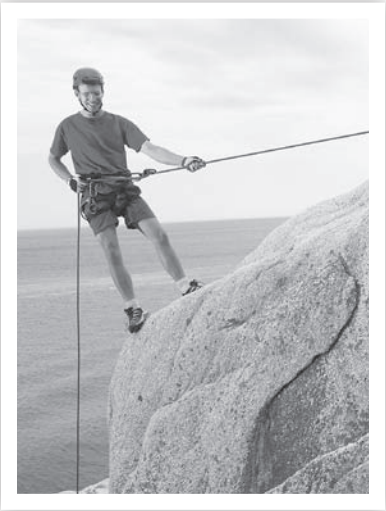

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PHYSICAL ACTIVITY
OBJECTIVE 2:

Increase the number of physical activity opportunities available to children

Physical activity is essential for a healthy childhood. Regular physical activity has beneficial effects on weight, muscular strength, cardio-respiratory fitness, bone mass, blood pressure, anxiety and stress, and self-esteem.[1,2]

Families and Individuals

Children are more likely to be active when families are active together and find ways to fit activities into each day. Here are the recommendations for children:

Children and Adolescents

The Dietary Guidelines for Americans 2005 and the National Association for Sport and Physical Education recommend that children and adolescents participate in at least 60 minutes of physical activity most days of the week, preferably daily. Any type of moderate or higher intensity physical activity, such as brisk walking, playing tag, jumping rope, or swimming count, as long as it is adds up to at least one hour a day.

Infants and Toddlers

The National Association for Sport and Physical Education recommends that infants (birth to 12 months old) should interact with parents and/or caregivers in daily physical activities that promote exploration of their environment. Toddlers (12-36 months) should accumulate at least 30 minutes daily of structured physical

In 2006, only 42 percent of Washington 10th graders were physically active at the recommended level.

In 2006, only 35 percent of 10th graders in Washington said they participated in physical education class on a daily basis. However, most 10th graders said they exercised for 20 minutes or more during PE class, regardless of how many days per week their PE class was scheduled.

activity, preschoolers (3-5 years) at least 60 minutes. Toddlers and preschoolers should engage in at least 60 minutes of unstructured physical activity and should not be sedentary for more than 60 minutes at a time, except when sleeping.

Children will be active when:

- Schools have comprehensive school physical activity programs.
- Child care settings promote active play.
- Youth sports and recreation programs are culturally competent.
- Play areas and sports facilities are safe and attractive.
- Neighborhoods have sidewalks and bike paths.
- Parents are good role models.
- Parents, teachers and child care staff enforce rules and limits about the use of televisions, video games and other media.
- Health-care professionals routinely provide "prescriptions" for physical activity. [6,7,8]

Priority Recommendation A:

Adopt school-based curricula and policies that provide quality, daily physical education for all students.

Children who are physically active in school have lower risk of chronic disease.[1] Quality physical education (PE) can help prevent obesity and promote lifelong physical fitness.[2] As part of an integrated Coordinated School Health Program, (***Appendix E***) a quality PE program helps ensure students' well-being and readiness to learn. Time spent on PE at school does not diminish learning in other areas such as math, reading, and science.[2]

A high quality physical education program:

- Emphasizes knowledge and skills for a lifetime of physical activity.
- Meets the needs of all students.
- Keeps students active for most of the PE class time.
- Teaches self-management as well as movement skills.
- Is an enjoyable experience for students.[3]

Recommendations for Physical Education

The National Association for Sport and Physical Education recommends 150 minutes a week of PE for elementary school children and 225 minutes for middle and secondary school children. While some schools allow students to be exempted from physical education, many school districts have adopted strong policies that strictly limit PE waivers.

Washington requires at least 100 minutes of PE per week for elementary and middle school students. In 2010, the recommendation increases to 150 minutes.

See Appendix D for the Washington PE requirements.

Key Strategies for Effective PE Programs

Teach skills that promote lifelong physical activity.

Some activities such as walking, dancing, swimming, hiking, and cycling are more likely than others to be continued past the school years. School PE programs help students adopt lifelong healthy lifestyles when they foster positive attitudes about physical activity and build skills for activities that can be enjoyed for many years. The best PE programs reflect the physical and mental development of children. These programs start with basic movement skills in the early grades, discourage early specialization in specific sports and offer a broad range of learning opportunities through childhood and adolescence.[4]

Increase time that students are actively involved in PE at school.

In some schools students do not actually move very much during their PE classes. Children are more active in classes that are taught by teachers who have specialized PE training, focused on fitness and based on curriculum designed to keep students active during most of the class.[5] Longer class sessions are associated with higher levels of moderate and vigorous activity and improved fitness levels.[6]

Train teachers in physical education and enhance the training of physical education teachers.

Well trained teachers are prepared to plan, implement and evaluate successful physical education programs. Compared to non-specialists, PE specialists teach longer lessons, spend more class time on developing skills, impart more knowledge, and provide more moderate and vigorous physical activity. CDC recommends that school districts hire specialists and provide on-going training for PE teachers.[7]

Examples of Activities:

One program that incorporates all three of these elements is *Five for Life,* a K-12, sequential PE curriculum that has been adopted in over 15 districts in Washington, and that is based on Washington's Essential Academic Learning Requirements. ***Five for Life*** blends academic content, fitness related activities

Cultural Competence

In Seattle, the Austin Foundation (http://www.youthandfitness.org/) transforms lives by providing accessible opportunities for young people to experience the benefits of living a healthy and fit lifestyle. The foundation serves diverse communities of children, youth and families by going to schools, community centers, alternative schools and detention centers. The foundation encourages family participation, participates in community events and advocates for community policies and practices that promote healthy lifestyles. Through its youth internship program, the foundation has a presence at events such as the Umoja Fest, Central Area Festival, Northwest Taskforce Sickle Cell Walk and El Centro de la Raza summer fitness programs, and has addressed the African American Advisory Council to the Chief of Police.

In 2006, 51 percent of Washington middle and high school principals said their school supports walking or biking to and from school through promotional activities, designated safe routes and bike rack storage. Almost two-thirds said their schools offered intramural activities or physical activity clubs.

and motor skill development. Students set personal goals and understand the importance of being active and maintaining or improving the five components of fitness: heart and lung strength, muscular strength, muscular endurance, flexibility, and body composition.

In Lewis County, teachers who were trained to use the *Five for Life* curriculum had better confidence and knowledge about teaching nutrition and physical activity compared to teachers in schools who where the curriculum wasn't used. Students in the schools that used *Five for Life* had better scores and knowledge and fitness tests than students in other schools.

At Olympic Middle School in Shelton, students receive between 136 and 204 minutes of PE per week-well in excess of state requirements. During PE, students spend half of the time participating in games and half in a cardiovascular workout. Students are able to earn "seals" through activities that focus on pride, academics, and wellness. After earning ten seals, students are invited to take part in a quarterly outing that include physical activity, such as visiting Wild Waves water park or roller skating. Students also can earn seals by participating in one of the many intramural activities offered at the school.

Priority Recommendation B:

Encourage policies that provide students with opportunities for physical activity outside of formal physical education classes.

Children move more when schools create opportunities for students to be active several times during the school day.[1,2]

The National Alliance for Nutrition and Physical Activity,[3] the National Academy of Sciences,[4] and the American Academy of Pediatrics[5] promote active school communities where families, schools, community recreation leaders and health care professionals work together to provide opportunities for physical activity outside of formal PE classes such as:

- daily recess for elementary schools
- before and afterschool opportunities
- safe routes to school
- use of school facilities outside of school hours
- physical activity in classrooms and during school break periods

Examples of Activities:

Increase opportunities for students to walk or bike to and from school.

Students who walk or bike to school are more likely to meet recommendations for physical activity.[6] However, over the last 35 years, the number of children who live within a mile of school and walk or ride a bike to school has dropped by almost 50 percent. All Washington schools have plans for safe routes to school, but parents are concerned about weather, and safety.[6] In Washington, 28 to 32 percent of middle school and high school students were scared or felt uneasy because of dogs or people in their neighborhood or on the way to school.[7] Communities can address these safety concerns and reduce barriers to walking and biking.

When neighborhoods are safe and full of children walking to school, adults and seniors also walk more. Events that highlight walking to school can lead to lasting changes in neighborhood environments and city policies.

Moses Lake Walk to School Day

More than 500 students from Moses Lake's Garden Heights Elementary School walked to school as part of the Walk to School Pilot Project co-sponsored by Healthy Communities - Moses Lake and Safe Kids Grant County. Families living within walking distance were encouraged to walk with their children. Students who typically rode the bus or were driven to school were dropped off at a nearby middle school. From there, students walked to school along a designated route. Parents, grandparents, and staff lined the walking route and encouraged the students.

Walking School Bus in Skagit County

With the support of Skagit Safe Kids Coalition and a grant from National Safe Kids Coalition, the Mount Vernon Healthy Communities Project Lincoln Elementary Healthy School Project introduced a "walking school bus" (www.walkingschoolbus.org). A walking school bus has a "hub and spoke" format. Volunteers meet students at one of three hubs, and then walk along a set route to school, picking up additional students en route.

Develop quality afterschool programs that engage children in physical activity and reinforce lifelong fitness.

Afterschool programs provide places to be active and alternatives to sedentary behaviors. Afterschool programs may be of special benefit to communities with limited recreational facilities and for children living in areas where neighborhood safety concerns are a barrier to outside physical activity.[4] The essential steps toward developing effective afterschool programs are:

Key Points

- Childhood obesity among ages 2-5 has increased 35 percent in the past 10 years
- Fewer than 25 percent of American children get at least 30 minutes of any type of physical activity every day
- Children are more likely to be active when their parents serve as role models for physical activity - active parents raise active children.
- A child who is physically active will have stronger muscles and bones and is less likely to become overweight
- Children who are physically active perform better in school and have fewer behavior problems

- Establish the vision.
- Integrate nutrition and physical activity with youth development principles.
- Provide exciting and meaningful learning experiences that integrate nutrition and physical activity into core activities.
- Work closely with the community, families and the school as full partners.
- Develop diversified funding to sustain a quality program over time.

The Center for Collaborative Solutions (CCS) has developed a guide to help school leaders and partners develop high-quality afterschool programs.[8]

The percentage of 10th graders in Washington who said they watched TV or used the computer for fun for 3 or more hours on an average school day increased from 45 percent in 2002 to 53 percent in 2006.

Provide funding to enhance physical activity facilities at schools.

Children are more active when they have access to clean and attractive facilities.[9,10] Schools and communities can redesign playgrounds, add bike racks or lockers, install lights in outdoor fields, and build well-equipped playing fields and physical activity centers.

At Van Asselt School in Seattle, the Health Team received a KABOOM grant from Home Depot to revitalize the school's playground. The school is situated next to a community playing field- but this field was run down with outdated and inadequate equipment. During a single day, over 200 Home Depot employees and 100 parents and staff from the school worked to recreate a safe and clean playfield with new play equipment.

Priority Recommendation C:

Provide opportunities to replace sedentary behaviors, such as watching television, with physical activity.

When children spend too much time watching television they are more likely to be overweight.[1] Food advertising changes what children eat, and almost all the food that is advertised on television and the internet is high in calories and low in nutrients.[2,3,4] There are national goals to improve health by reducing the use of television and other "screens."[5]

American Academy of Pediatrics (AAP) recommends:

- Limit children's television time to no more than one or two hours of quality programming per day.
- Remove television sets from children's bedrooms.
- Discourage television viewing for children younger than two years, and encourage more interactive activities such as talking, playing, singing and reading together.
- Support efforts to establish comprehensive media education programs in schools.[6]

Many infants[7] and 31 percent of Washington sixth-grade youth, 61 percent in eighth and tenth grades, and 54 percent in 12th grade[8] exceed the AAP recommendations for television viewing and other screen time.[7] Infants of non-high school graduates are almost four times as likely to watch at least one hour of television a day compared to those of college graduates.[9]

Institute of Medicine (IOM) recommends:

- Limit children's screen time at home to less than two hours per day.
- Implement school-based screen time reduction interventions.
- Develop guidelines for advertising and marketing to children and youth.[10]

Representatives of more than 30 agencies and programs that are working to reduce the impact of media and screen-time came together for the Washington State Smart Screen Time Summit in 2007. Participants explored policy and environmental changes to promote smart screen use, reduce screen use and increase physical activity opportunities for children.[11] Priority strategies for Washington are:

- Provide training and resources for early childhood and health professionals.
- Encourage publicly funded or licensed facilities to comply with AAP screen guidelines.
- Establish systems to dispose of televisions and computers to discourage their use in children's bedrooms.

Examples of Activities:

Limit access to television and other screens in child care and homes.

Initiatives like, *Living Outside the Box* (www.metrokc.gov/health/redu/cetv) and *Washington Active Bodies Active Minds (WAABAM)* (www.waabam.org) promote thoughtful use of screens and media by providing resources and trainings for families and early childhood and health professionals. These initiatives have reduced screen use in child care facilities and increased the percentage of providers who talk to parents about screen use at home. Incorporating screen time recommendations for child care facilities into the Washington Administrative Code (WAC), could impact screen time policies in licensed child care facilities.[12]

Communication

Public Awareness for "Tweens"

The Spokane County Health District was an active participant in the *VERB™ It's what you do* campaign**.** VERB was a national, multicultural, social marketing campaign coordinated by the Centers for Disease Control and Prevention (CDC) to encourage young people ages 9–13 (tweens) to be physically active every day. Seventy four percent of American "tweens" were aware of the campaign, and the campaign successfully increased physical activity in this age group through paid advertising, marketing strategies, and partnership efforts. In Spokane, local media enhanced the national messages, a water tower was painted with multicultural active tweens, and community wide events provided fun opportunities for tweens to be active.

http://www.cdc.gov/youthcampaign/index.htm

Resources and Networking for Safer School Travel

This program for elementary schools across Washington State seeks to get more children walking or biking safely to school. The project is a partnership between the Bicycle Alliance (http://www.bicyclealliance.org) and Feet First (http://www.feetfirst.info). Together they have formed the Center for Safe Routes to School in Washington State (http://www.saferoutes-wa.org) to provide a central resource for tools and networking for transportation professionals, local law enforcement agencies, planners and designers, families, schools and health professionals.

Increase physical activities in child care and youth programs.

Health departments in King and Snohomish Counties regularly offer workshops that provide practical resources for child care and youth programs. In King County, 76 percent of participants in the *Fuel and Play Workshop* used materials and information from the workshop to increase children's physical activity.

Increase options for physical activity in the community.

The Spokane County Physical Activity Resource Guide is released each year during the last week of school in June, (http://www.srhd.org/downloads/health_activity/PAGuide2006.pdf). The guide provides alternatives to sedentary behaviors during the summer and includes information on nutrition, physical activity, and places to go for low-cost or free physical activities in Spokane County.

No Child Left Inside is a program administered by the Washington State Parks and Recreation Commission that makes grants available to public agencies, for-profit corporations, private non-profit organizations, public and private schools, private individuals and community-based programs to provide opportunities for children to be outside and physically active (www.NoChildLeftInside@parks.wa.gov).

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Physical Activity Objective 2: Increase the Number of Physical Activity Opportunities Available to Children

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PHYSICAL ACTIVITY OBJECTIVE3:

Increase the number of active community environments in Washington

Active Community Environments are places where people of all ages and abilities can easily make physical activity part of their daily lives. In many communities residents do not have the choice to safely walk, bike or enjoy other forms of active transportation.[1] Active Community Environments are about creating these choices and restoring the opportunity to experience the benefits of moderate daily activity for all of Washington's residents. People who live in Active Community Environments are less likely to be obese and more likely to enjoy a high quality of life. Active Community Environments decrease air pollution and reduce personal and infrastructure costs associated with automobile traffic.[2]

A 2005 survey of Washington adults found that people who live within walking distance of destinations such as grocery stores and restaurants were more likely to walk or bike often. They are also more likely to walk or bike if they felt their neighborhood was safe and easy to walk in.

Families and Individuals

Small differences in our daily lives make a big difference in health. It only takes about 150 extra calories a day for a child to become obese.[3] Walking about one and a half miles each day for work, school or shopping would "burn" those extra calories. Through much of human history we have been able to move freely through our towns and countryside, but now, many people find themselves unable to fit daily walking into their lives. This contributes to the slow and gradual weight gain that most of Washington's residents experience throughout their lives. People feel free to walk and bike as they go about their days when:

- There are other people walking and biking on the streets and sidewalks.
- There are destinations such as schools, shops and restaurants nearby.
- Public transportation is fast, safe and reliable.
- Stores are oriented to pedestrians, and people don't have to cross busy parking lots to enter the front door.
- There is protection from speeding cars.
- It is safe to cross the street because crosswalks are well marked, traffic lights provide enough time for slow walkers to cross, curbs are designed to be easy for those in wheel chairs to use, and traffic laws are enforced.
- Sidewalks and trails are attractively landscaped.[4,5]

Active daily transportation will improve the health of almost everyone, but many people walk and bike for recreation too. In fact, walking (or hiking) is the number one recreational activity in Washington.[6] In 2002, Washingtonians walked and hiked for recreation mostly in parks and forests. By 2006, these activities had become more urban. In addition to building and maintaining backcountry trails, investment can enhance trails and paths in urban and suburban areas too.

Priority Recommendation A:

Use urban planning approaches - zoning and land use – that promote physical activity.

With the growth of suburban developments, more and more Washington residents live in automobile-oriented communities rather than in environments that encourage modes of active transport such as walking, cycling, and other non-motorized methods. Existing zoning and land use policies, that were developed without consideration of their impact on human health, have led to disconnected development patterns and created places that make walking and biking difficult.[4]

Health Impact Assessment (HIA) is a formal process to evaluate the health effects of a policy, project, or program. Communities use HIA to analyze how development projects might affect walking, bicycling, and transit, as well as air and water quality, public safety, and a sense of community. In some cases, HIAs are required as part of the regulatory process. Public Health Seattle and King County, Seattle City Planning, Feet First, and community stakeholders conducted an HIA of Seattle's Beacon Hill neighborhood in order to assess the potential health effects of future development near a light rail station. The assessment examined the project's potential impact on public transit,

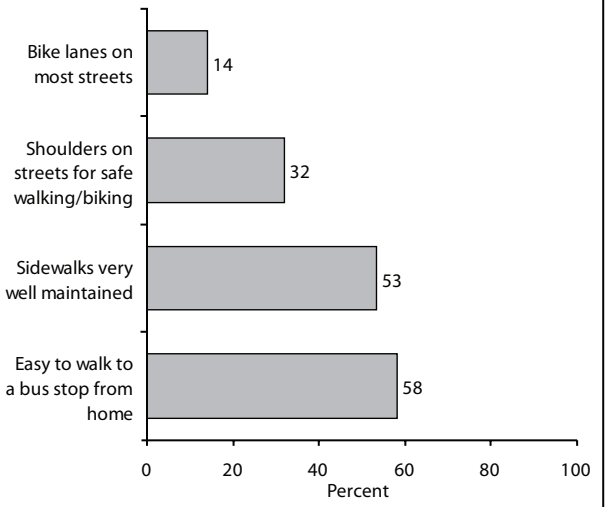
walkability, and indicators of a healthy community. Results were used to provide input for redevelopment planning for areas impacted by the Sound Transit light rail project.

Examples of activities:

Develop and disseminate model zoning and land use policies to support physical activity.

All communities have existing policies that influence the future of the community. When they are provided with choices, policy makers are able to choose policies that are associated with livable, health-promoting communities. Engrossed Substitute Senate Bill (ESSB) 5186, passed by the Washington State Legislature in 2005, requires communities to consider urban planning approaches that promote physical activity.[7] In response to this legislation, policies have been developed and implemented in many of Washington's communities.[8] For example, the City of Wenatchee's comprehensive plan requires sidewalks and pathways through new mixed-use and commercial development to improve pedestrian access. Yakima's comprehensive plan encourages converting streets from four lanes to three with bicycle lanes, and designates a fund for improving intersections to increase pedestrian usage.

Community Walkability and Bikeability in Washington, 2005



While half of Washington residents said they had well-maintained sidewalks and bus stops that are easy to walk to, fewer reported bike lanes or shoulders on streets for safe walking and biking.

Promote mixed-use development for walkable and bikeable communities.

The most active communities allow and encourage a rich mix of land uses: homes, schools, churches, shops, restaurants and offices.[9] Accessibility, attractive scenery, good lighting, restrooms, drinking water, and well-designed and well-maintained paths and sidewalks are important, too.[10] A study conducted in Seattle showed that neighborhood characteristics, including higher residential density and clusters of destinations like grocery stores and restaurants, increase the frequency of walking.[11] This is true for older adults as well.[12]

Local governments can plan and implement mixed use, walkable neighborhoods.

Several Washington cities, including Mill Creek, Lake Forest Park, Sammamish and Kenmore have designated town centers that include retail, restaurant, office, cultural and recreational facilities, and moderate-density residential areas.[13]

Build or renovate schools in neighborhoods.

Fewer children walk or bike to school when new schools are built on large sites in undeveloped areas.[14] Schools sited away from students' homes require extensive parking lots and large expensive bussing programs and limit a community's sense of connection with its schools. For several decades, national school construction guidelines recommended building larger schools on larger sites, but these have recently been changed to encourage school siting based on local needs. Renovating older schools in walkable communities preserves active community environments. Green Park Elementary School in Walla Walla is located in an older part of town that was developed using a walkable grid of streets. The renovation of this historic building received an architectural award.

The Spokane Comprehensive Plan directs that new elementary and middle schools should be located centrally in their service area on sites that allow children to walk safely to school. Lidgerwood, Lincoln Heights, and Ridgewood Elementary schools were replaced by new construction. The new two-story design allowed Lidgerwood to retain its spacious outdoor playfield and gain indoor space including additional classrooms and a gym.

Daybreak Primary School and Daybreak Middle School in Battleground are designated as primarily walking schools. Eighty percent of the students live within a mile of the schools and will not be bussed to school. Parents are encouraged to walk with their children. The school board hopes that the "walking school" will foster parent involvement in the schools as well as save the cost of busing. Similar strategies were applied to planning for two new school service boundaries scheduled to open in 2008.

Priority Recommendation B:

Change transportation policy and funding to promote walking and bicycling.

Washington residents often say that they don't walk or bike because they are afraid of traffic. Pedestrian and bicycle accidents can be reduced by a well-engineered bicycle and pedestrian transportation system that includes cross walks, street lighting, and traffic signals.[1]

In Washington, less than one percent of the total transportation safety budget was spent on pedestrian and bicycle safety in 2007.[2] Washington's Paths and Trails Law requires that 0.3 percent of the total state and federal transportation construction budget and 0.42 percent of local motor vehicle funds be spent for paths and trails.[2] Regarding policy development, ESSB 5186 specifically requires inclusion of a bicycle and pedestrian component in a

community's comprehensive plan,[3] and Washington's Growth Management Act (chapter 36.70S RCW) requires that community comprehensive plans include "collaborative efforts to identify and designate planned improvements for pedestrian and bicycle facilities and corridors that address and encourage enhanced community access and promote healthy lifestyles."[1]

Partners

The Active Community Environments project is a state-level collaboration between the Washington State Department of Transportation, the State of Washington Department of Community, Trade and Economic Development, the Washington State Department of Health, and Feet First to create healthier communities. Examples include:

- Association of Washington Cities
- Bicycle Alliance of Washington
- Feet First
- Mobility Education Foundation
- National Park Service
- University of Washington Center for Public Health Nutrition
- Washington Coalition for Promoting Physical Activity
- Washington State Traffic Commission
- Washington State Parks and Recreation Commission

Examples of activities:

Establish local non-motorized transportation citizen committees that report to the governing body (i.e. city council, mayor, etc.).

Formal non-motorized transportation advisory committees have been established in many communities in Washington. The committees identify the highest priority needs and assure that policy makers allocate funding for infrastructure change. These committees have successfully developed non-motorized policies and improved non-motorized facilities.[4] For example, in the City of Olympia, a group of concerned and dedicated citizens has guided the city through effective changes in policy and infrastructure that have resulted in the addition of bicycle lanes and traffic safety improvements to support bicycling.

Provide incentives for non-motorized transportation at worksites.

Many Americans would bike to work if their employers offered financial or other incentives.[5] The Commute Trip Reduction (CTR) law passed in 1991 requires Washington employers with more than 100 full-time employees to develop and implement CTR programs that encourage employees to seek alternatives to single occupant automobile transportation. The CTR law also provides tax or non-tax credits to smaller businesses and their employees (fewer than 100 employees) and in small communities (counties with fewer than 150,000 residents) as an incentive for promoting alternative transportation. Currently, more than 1,100 worksites and more than 560,000 commuters participate in CTR programs.[6]

Saint Joseph Hospital in Bellingham has a program called SCOOT (Smart Commuters Opting for Other Transportation). For each day they do not drive to work alone, employees who bike or walk can receive $1.50 plus tax (total incentive equals $1.92) and they are entered into a drawing to receive a $25.00 gift card per month. SCOOT is promoted on the hospital intranet, in brochures, and highlighted at all new employee orientations. There are bike racks and lockers/storage facilities at both main and south campus.

Build connectivity between trails, paths, neighborhoods and schools, and sidewalks to enhance the ability to be physically active.

A connected grid of streets, sidewalks and paths promotes active transportation.[7,8] The City of Port Townsend requires new subdivisions to provide pedestrian and bicycle paths to connect roads and neighborhoods.[9] The Discovery Trail bicycle and pedestrian bridge over I-5 in Clark County has improved connectivity across this major barrier to active transportation, and in Sequim the Olympic Discovery Trail connects downtown to parks, schools, and residential neighborhoods.

Develop a trail/path system in a community and educate the public on how to use it.

A network of safe trails, paths, and supporting facilities makes it easier to leave the car at home.[1,6] The City of Moses Lake has partnered with the Rivers, Trails, and Conservation Assistance Program of the National Park Service to develop a network of linked paths for exercise, recreation, transportation and tourism.[10] Signs and detailed trail maps make it easy for Moses Lake residents to use the trails.

Increase the proportion of managed care organizations and hospitals that become their own "active community environment." Group Health has approximately 50 sites in Washington. Throughout the system new construction and renovations to facilities incorporate principles of active environments. Recent new sites in Bellevue, Redmond, and Spokane included employee lockers, showers, secure bicycle storage facilities, public bicycle racks, more inviting or open stairs, and outdoor spaces.

Priority Recommendation C:

Enhance the safety and perceived safety of communities to improve walkability and bikeability.

Concerns about crime and community safety are major barriers to active transportation.[1] Walking is one of the most hazardous methods of travel in the United States.[2] While only five percent of all trips are made on foot, pedestrians make up 12 percent of all traffic deaths. Between 2001 and 2005, 11 percent of all traffic deaths in Washington were pedestrians.[3] The young and old are particularly at risk. In Washington, pedestrian injuries are the third leading cause of death for children ages one to 16.[3] While people over 65 represent 12 percent of the population of Washington, they make up 20 percent of the pedestrian deaths.[3]

Education

Mobility Education

The Mobility Education Foundation strives to change the way we think about getting around by giving teens an understanding of all kinds of transportation – not just the keys to the car. The foundation promotes mobility education so that teens can make safe choices in a world where motor vehicle crashes are the leading cause of death among people ages four to 33. Every year in Washington alone, car accidents kill 100 youth ages 14–20. Mobility education instills healthy habits that make it possible for teens to protect the wellbeing of their bodies and the planet by teaching them the risks of physical inactivity and the environmental effects of transportation decisions (www.mobilityeducation.org).

Cultural Competence

Approximately 20 percent of Americans have a disability and the percentage of people with disabilities is increasing. Everyone has the right to use pedestrian facilities. Active Community Environments can include features that make it easier for all residents to be active. Here are some highlights from the Federal Highway Commission's, *Designing Sidewalks and Trails for Access* (www.fhwa.dot.gov/environment/sidewalk2):

- Consult with representatives from disability agencies and organizations during all phases of project development.
- Include people with disabilities in the first phases of programming, planning, designing, operating, and constructing pedestrian facilities.
- Address maintenance and safety problems, such as potholes or debris, in crosswalks and sidewalks.
- Implement simple and inexpensive solutions, such as removing newspaper stands, trash receptacles, and other movable obstacles from the path of travel.
- Make accessibility improvements to existing facilities before other types of improvements.
- Design accessible driveway crossings with level landings.
- Combine parking lots to limit the number of entrances and exits.
- Prioritize sidewalk construction.
- Provide a raised walkway between the sidewalk and entrances to reduce pedestrian exposure to automobile movement.
- Control curb radius to keep turning speeds low.

There are effective ways to enhance pedestrian safety. Nationally, half of all pedestrian fatalities occur on roadways that run through residential neighborhoods. In an effort to move more cars through a given area in less time, residential streets have been widened. Unfortunately, increasingly wider streets encourage increasingly faster vehicular speeds and result in more pedestrian deaths.[2] Narrow streets promote slower traffic. Many pedestrian collisions occur near bus stops or at street crossings without a traffic signal or stop sign. Improved bus stop facilities, pedestrian safety measures and traffic law enforcement will help to make people feel and be safer when they take trips that combine public transportation with walking.[4] In 2006, Seattle Mayor Greg Nickels of the City of Seattle announced a "Safe Crossings" campaign, with $2.5 million pledged for pedestrian safety improvements to crosswalks and sidewalks.[5]

Examples of activities:

Enhance pedestrian safety by enforcing vehicle speed limits and regulations regarding safe vehicle passing.

Speeding motor vehicles are the most common concern of walkers on local and arterial streets.[4] Community safety is improved by reducing speed limits and enforcing posted speed limits. The Washington State Legislature passed House Bill 1108 in 2005 to improve bicycle safety. The bill prohibits vehicles from passing when pedestrians or bicycles are in view on the road and approaching from the opposite direction.[6]

Support training of all law enforcement officers about pedestrian and bicycle safety.

Law enforcement can be an influential partner in promoting active and safe communities. Training at the Washington State Police Academy, and subsequent in-service training programs, focus on understanding and enforcing the laws that govern pedestrian and bicycle safety. Officers are trained to investigate accidents involving pedestrians and bicyclists. The Washington State Traffic Commission has partnered with the Seattle Police Department to conduct pedestrian safety patrols throughout the City of Seattle.[7] In the City of Lynnwood, a 2006 traffic safety campaign emphasized speed enforcement and pedestrian safety. From 2005 to 2006, collisions involving pedestrians and bicycles dropped by 81 percent in the city.[8]

Implement community policing and block watch programs in communities.

Neighborhood watch groups that increase safety and reduce crime can increase physical activity by helping residents feel more comfortable about walking or playing outside. In Kent, the Volunteer in Police Services (VIPS) group provides support to the police department with the "Speed Watch" program, using radar trailers to monitor traffic speeds in neighborhoods.[9]

Promote safe and active routes to school.

Even when distances to school are one mile or less, fewer children walk or bike and more ride a yellow bus or get a ride from family or friends.[4] Careful review of local conditions and safety considerations is critical before encouraging walking and biking to school. The Kids Walk-to-School Program, promoted by the Centers for Disease Control and Prevention, involves school officials, parents, and children. This program works to improve safe and active routes to school by increasing awareness of the importance of taking advantage of the trip to school as an opportunity to be active. It also alerts communities to unsafe conditions that need to be addressed for all community members who want to use the sidewalks.

The Center for Safe Routes to School in Washington State, a collaboration between Feet First and the Bicycle Alliance of Washington, is funded by a grant from the Washington State Department of Transportation.[10] The center helps schools and communities design, implement, and sustain programs to increase safe and active routes to school. At Lincoln Elementary School in Mount Vernon only 10 percent of students were walking to school, but a Walking School Buses program allowed more students to walk to school safely and in 2007 over 30 percent of fourth through sixth graders reported walking to school.

Apply model policies for bicycle and pedestrian-oriented transportation systems.

Transportation systems that accommodate pedestrians and bicyclists help to support active lifestyles. "Complete street" principals of design, construction and operation address safety for all users – motorists as well as pedestrians, bicyclists, and transit riders of all ages and abilities (www.completestreets.org). In 2007, the cities of Kirkland and Seattle adopted complete street ordinances into their municipal codes.[11] A "road diet" policy encourages converting four-lane streets to three lanes and incorporating facilities for pedestrians, bicyclists, and transit users. The cities of Yakima, Gig Harbor, University Place, Bellevue, Seattle, and Kirkland have adopted similar policies.

Key Points

- All Washington residents want to be able to choose their transportation.
- Walking a mile or two each day, as a routine part of getting to school, work or shopping could prevent weight gain.
- The built environment can make walking and biking easy and safe.
- Many Washington communities have made great progress toward becoming active community environments .
- Children who walk or bike to school add 20 minutes of physical activity to their day.

Use traffic-calming measures, such as speed bumps and bulb-outs.

A pedestrian hit at 35 miles per hour has an 85 percent chance of being killed. The same pedestrian hit at 20 miles per hour would have an 85 percent chance of recovery. Therefore, slowing vehicle speeds is very important to non-motorized safety.[12] The City of Kirkland has a comprehensive neighborhood traffic-calming project that has improved community safety. Speed bumps reduce speeds on neighborhood streets by about five miles per hour.[13] Curb extensions, also referred to as bulb-outs, made pedestrians more visible to motorized traffic and shortened the crossing distance between the curbs so that pedestrians were able to cross the street more quickly.

Communication

The Cowlitz on the Move Web site (www.cowlitzonthemove.org) provides maps, pictures, directions, descriptive and informative guides, and accessibility information for trails throughout the county.

"Share the Road" personalized license plates for Washington vehicles spread the word about bicycle safety and fees support advocacy for cycling. As of October 2007, more than 2,400 plates had been sold.

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Physical Activity Objective 3: ACES

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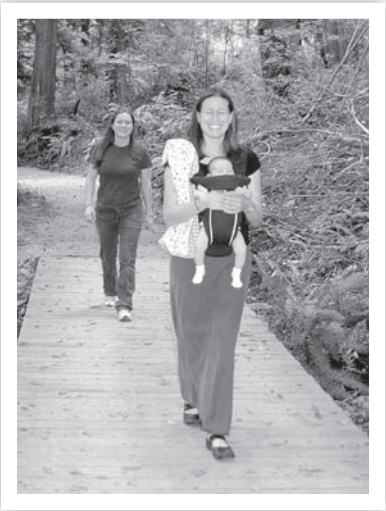

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Models, Factors and Theories of Change

APPENDIX A

Introduction

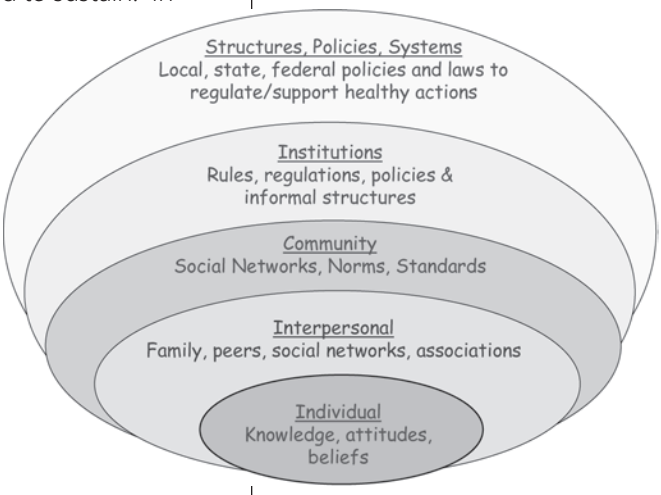
Public health is defined by its focus on prevention and on the health of populations, rather than individuals. It takes a systematic approach to problem solving that includes reviewing evidence (data) to determine the existence, scope and magnitude of a problem, and it uses models and theories to explain the rationale behind its interventions. In this appendix, we explain some of the models and theories behind the priority recommendations in the plan.

A Social Ecological Perspective

Researchers suggest that the recent rise in obesity rates are due to changes in the physical, social, and economic environments that make it increasingly harder for individuals to get the activity and health-promoting foods that they need. This "obesogenic" environment is "the sum of influences that the surroundings, opportunities, or conditions of life have on promoting obesity in individuals or populations."[1] In an obesogenic environment, food marketing, media, federal and state policies related to food and agriculture, urban design, education, and transportation work together to constrain healthy eating and physical activity in communities, worksites, homes and schools.[1]

To reverse growing rates of obesity, people will need to balance energy intake (nutrition) and output (physical activity). Yet human behavior is difficult to change, particularly in an environment that does not support change. This is why even the best individual weight loss programs are hard to sustain.[2] In order to increase physical activity and healthy eating, health promotion efforts need to focus not only on the behavior choices of each individual, but also on factors that influence those choices.[3] These factors operate out of several spheres of influence, including 1) public policy 2) institutional/ organizational, 3) community, 4) interpersonal as well as the 5) individual levels. This *social ecological* perspective helps us to pinpoint opportunities for promoting health by understanding the factors that influence behavior at each level of the social ecological model (shown above) and by recognizing that an individual's behavior both shapes, and is shaped by, multiple levels of influence.

Levels of Influence in the Social Ecological Model



Efforts to change health behavior are more likely to be successful when we work within multiple spheres of influence at the same time.[3] For example, we can increase the knowledge, skills, and self efficacy of low-income individuals to

adopt healthy nutrition habits through demonstrations and classes offered by the Basic Food Nutrition Education program. In family-centered programs such as those offered by the Early Childhood Education and Assistance Programs in Washington, we can increase interpersonal support for healthy nutrition and active lifestyles. At the institutional level, we can make it easier for individuals to change health behaviors by encouraging employers to implement policies that support walking or biking to work. At the community level, we can encourage physical activity by enhancing pedestrian safety. At the social structure level we can work with transportation and urban planning experts to develop city plans that make it easier for citizens to walk or bike to work, libraries, churches, schools, entertainment, shopping and other services.

Influential Factors

The social ecological perspective, described above, suggests that interventions at multiple levels of the model are needed to address obesity. This section describes the factors that researchers have linked to obesity at each level of the social ecological model.

Individual Level:

- **Physiology** includes a mix of biological variables e.g. genetic predisposition to obesity, level of satiety and resting metabolic rate.
- **Individual activity** consists of an individual's level of recreational, occupational and transport activity, as well as the learned activity patterns. Researchers have found that the higher one's fitness level, the easier it is to engage in physical activity, and vice versa.
- **Individual psychology** includes factors such as self-esteem, personal stress, and level of 'food literacy'.
- Organizations and Public Policy:
- **Environment for physical activity** includes the cost of physical activity, perceived safety and walkability.
- **Food consumption** includes many characteristics of the food market in which consumers operate such as the level of food abundance and variety, the nutritional quality of food and drink, energy density of food, and portion size.
- **Food production** includes drivers of the food industry such as pressure for growth and profitability, market price of food, and effort to increase efficiency of production.

Community Level:

- **Social psychology factors** include education and media availability. It also includes variables related to societal attitudes to weight such as the importance of ideal body-size image.

Using Theory to Guide Interventions

As described above, interventions could be developed to change influential factors at each level of the social ecological model. Theories have been developed to describe the mechanisms by which interventions at each level of the social ecological model change influential factors, resulting in more supportive environments and healthier physical activity and nutrition behaviors. The following theories help explain how the priority recommendations of the plan work to achieve its six objectives, as well as its overarching goals.

Theories Governing Individual Behavior Change

A number of theories have been developed to describe how changes in factors at the individual and interpersonal levels of the social ecological model work.[1] These theories can be broadly characterized as ***c****ognitive behavioral theories,* and share the following key concepts:

1. What people know and think affects how they act.
2. Knowledge is necessary, but not sufficient to produce most behavior changes.
3. Perceptions, motivations, skills and social environment are key influences on behavior.

Some well-known cognitive behavioral theories:

The Health Belief Model, (HBM) HBM addresses the individual's perceptions of the threat posed by a health problem (susceptibility, severity), the benefits of avoiding the threat, and factors influencing the decision to act (barriers, cues to action, and self-efficacy.

The Stages of Change (Transtheoretical) Model The Stages of Change Model describes individuals' motivation and readiness to change a behavior.

The Theory of Planned Behavior (TPB) The TPB examines the relations between an individual's beliefs, attitudes, intentions, behavior, and perceived control over that behavior.

The Precaution Adoption Process Model (PAPM) The PAPM names seven stages in an individual's journey from awareness to action. It begins with lack of awareness and advances through subsequent stages of becoming aware, deciding whether or not to act, acting, and maintaining.

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[1] To some extent these theories also explain how change works at the organizational and policy level because institutions and policy making systems are composed of individuals.

Theories Governing Social Change

Social Cognitive Theory (SCT) The SCT describes a dynamic, ongoing process in which personal factors, environmental factors, and human behavior exert influence upon each other.

Community Organization and Other Participatory Models emphasize community-driven approaches to assessing and solving health and social problems.

Diffusion of Innovations Theory The Diffusion of Innovations Theory addresses how new ideas, products, and social practices spread within an organization, community, or society, or from one society to another.

Communication Theory The Communication Theory describes how different types of communication affect health behavior.

Taken together, these theories can be used to influence factors within each level of the social ecological model in the followings ways:

Individual: health education strategies use behavior change theory to influence awareness, knowledge, attitudes.

Interpersonal: family, friends, peers that provide social identity and support.

Organizations: organizational change, diffusion of innovation, and social marketing strategies.

Community: social marketing, community organizing.

Public Policy: public opinion process, policy change process.

The Role of Public Health in a Comprehensive Approach

Behavioral scientists have turned their attention to finding effective ways to change our obesogenic environment. Policy changes in the realms of education, food labeling and advertising, food assistance programs, health care and training, transportation, urban development, commerce and taxation can lead to improvements in nutrition and activity patterns.

Any one profession, institution, or agency alone can not do this work. In developing and implementing this plan we are following these recommended steps:[2]

- Form a state-based coordinating group to develop policy on nutrition and physical activity.
- Identify opportunities to reallocate existing resources from ongoing initiatives in other sectors that are in line with nutrition and physical activity policy priorities.
- Educate leaders and provide guidance to decision makers about nutrition and physical activity issues.

Public health can provide leadership to this work. The three core functions of public health can be directly applied to the efforts of this plan. The process is to **assess** the barriers to healthy food and activity choices that contribute to the obesogenic environment; then **develop policies** that address barriers and enhance opportunities to choose healthy behaviors; and finally, to **assure** that all Washington State citizens have access to health-promoting environments.

One of the primary responsibilities of public health is to minimize the effects of societal and economic constraints that lead to health disparities. Environment and policy interventions have the potential to reach all residents of the state. State and community-level decisions have, over time, inadvertently resulted in communities where it is often difficult to be physically active and to make healthy food choices. This becomes especially troublesome for children, the elderly, the disabled, and the poor for whom transportation is an issue. One role of the Washington State Department of Health is to perform the policy development and assurance functions of public health by encouraging the institutions, agencies, and communities of Washington State to consider the effects on health and well being of all citizens as they make policy and planning decisions.

National Recommendations

In focusing on environmental and policy approaches in this plan, Washington State joins a national movement to seek out and address the root causes of the rapid increase in obesity. The following national guidelines, and many others, emphasize the importance of policy change:

- The National Governor's Association Center for Best Practices: The Obesity Epidemic – How States can "Trim the Fat"[4]
- The Surgeon Generals' Call to Action to Prevent and Decrease Overweight and Obesity[5]
- The Centers for Disease Control and Prevention: The Guide to Community Preventive Services – Physical Activity[6]
- The American Heart Association: Guide for Improving Cardiovascular Health at the Community Level[7]
- The Nutrition and Physical Activity Workgroup: Guidelines for Comprehensive Programs to Promote Healthy Eating and Physical Activity[8]
- The Society for Nutrition Education: Guidelines for Childhood Obesity Prevention Programs: Promoting Healthy Weight in Children[9]
- The American Academy of Pediatrics: Promoting Physical Activity[10]
- The U.S. Department of Health and Human Services: Healthy People 2010 (*Appendix C*)
- Institute of Medicine: Proventing Childhood Obesity: Health in the Balance[11]

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Criteria for Nutrition and Physical Activity

APPENDIX B

Strategies and Objectives

Related to Obesity: The purpose of the plan is to provide guidance for policies that will improve nutrition and physical activity environments in order to achieve related health benefits; in particular the reduction and prevention of obesity and chronic diseases such as diabetes and cardiovascular disease.

Population-based: The focus of the plan is on population-based strategies and policy and environmental changes to foster a reduction in obesity. Health education is an equally important, complimentary approach.

Evidence-based, theoretically sound, or recommended by nationally recognized authorities or experts

Evidence-based: The criteria used by the Task Force on Community Preventive Services will be used as the criteria to determine whether a strategy is evidenced-based as follows:

1. Most suitable: studies with concurrent comparison groups and prospective measurement of intervention (strategy) and outcome.
2. Moderate suitability: studies with retrospective designs or multiple pre or post measurements but no concurrent comparison group
3. Least suitable: single pre and post measurements and not concurrent comparison group OR exposure and outcome measured in a single group at the same point in time.

Strategies that have multiple studies in categories 1 and 2 indicating the same outcome are strongly evidence-based. Strategies where there are some, but not a sufficient number of studies in categories 1 and 2 to make strong statements of evidence-based effectiveness, would rank lower on being evidence-based. If studies fell into category 3 or if there were no formal studies, then the effectiveness of the strategy is not evidence-based.

Theoretically sound: For strategies that have not been formally studied, there needs to be a logic model linking the strategy to the intended goal. The plan might include a recommendation that if a strategy that is theoretically sound, but not evidence-based, is undertaken, it is important to include an outcome, rather than a process evaluation.

Recommended by a national group: Generally, nationally recognized authorities or experts recommend strategies that are based on quality standards relevant to their work. Therefore, recommendations by nationally

recognized groups support the strategy as being evidence-based, theoretically sound or otherwise advisable. If the strategy is not evidence-based, it is important to include an outcome, rather than a process evaluation.

Large impact for the resources used: Strategies that affect a relatively large portion of the population have the potential to have a greater impact in reducing obesity than those that affect a relatively smaller portion of the population. Therefore, DOH recommends ranking strategies that affect a large portion of the population relatively higher than those that affect fewer people.

Measurable: It is important to know how successful a particular strategy is in helping to meet an objective. Therefore, DOH recommends that objectives that are measurable be ranked higher than those that are not measurable. Being measurable does not mean that they are currently measured, only that they are written in a manner that makes them capable of being measured.

APPENDIX C

Healthy People 2010

The Healthy People initiative sets 10-year national objectives aimed to promote health and prevent disease. The Healthy People goals and objectives are based on cumulative data, knowledge, insights, trends and innovations related to health and wellness, our national health preparedness and prevention. Healthy People 2010 objectives have been in place since 2000 and the nutrition and physical activity objectives helped to guide development of the Washington State Nutrition and Physical Activity Plan.

The process of public input for assessing and shaping Healthy People 2020 began in 2008. Health and Human Services encourages communities and stakeholders in all states to participate in public meetings and comment periods. The listserv provides information and updates on Healthy People 2010 activities and progress. The framework will be released by 2009 and the objectives and guidance for achieving the new targets will be released in January 2010.

More information is available at: http://www.healthypeople.gov .

Healthy People 2010 Goals

Physical Activity

Improve health, fitness, and quality of life through daily physical activity.

22-1 Reduce the proportion of adults who engage in no leisure time physical activity

22-2 Increase the proportion of adults who engage regularly, preferably daily, in moderate physical activity for at least 30 minutes per day

22-3 Increase the proportion of adults who engage in vigorous physical activity that promotes the development and maintenance of cardio-respiratory fitness three or more days per week for 20 or more minutes per occasion

22-4 Increase the proportion of adults who perform physical activities that enhance and maintain muscular strength and endurance

22-5 Increase the proportion of adults who perform physical activities that enhance and maintain flexibility

22-6 Increase the proportion of adolescents who engage in moderate physical activity for at least 30 minutes on five or more of the previous seven days

22-7 Increase the proportion of adolescents who engage in vigorous physical activity that promotes cardio-respiratory fitness three or more days per week for 20 or more minutes per occasion

22-8 Increase the proportion of the Nation's public and private schools that require daily physical education for all students

22-9 Increase the proportion of adolescents who participate in daily school physical education

22-10 Increase the proportion of adolescents who spend at least 50 percent of school physical education class time being physically active

22-11 Increase the proportion of adolescents who view television two or fewer hours on a school day

22-12 Increase the proportion of the Nation's public and private schools that provide access to their physical activity spaces and facilities for all persons outside of normal school hours

22-13 Increase the proportion of worksites offering employer-sponsored physical activity and fitness programs

22-14 Increase the number of trips made by walking

22-15 Increase the number of trips made by bicycling

Nutrition and Obesity

Promote health and reduce chronic disease associated with diet and weight.

19-1 Increase the proportion of adults who are at a healthy weight

19-2 Reduce the proportion of adults who are obese.

19-3 Reduce the proportion of children and adolescents who are overweight or obese.

19-4 Reduce growth retardation among low-income children under age five years.

19-5 Increase the proportion of persons aged two years and older who consume at least two daily servings of fruit.

19-6 Increase the proportion of persons aged two years and older who consume at least three daily servings of vegetables, with at least one-third being dark green or orange vegetables.

19-7 Increase the proportion of persons aged two years and older who consume at least six daily servings of grain products, with at least three being whole grains.

19-8 Increase the proportion of persons aged two years and older who consume less than 10 percent of calories from saturated fat.

19-9 Increase the proportion of persons aged two years and older who consume no more than 30 percent of calories from total fat.

19-10 Increase the proportion of persons aged two years and older who consume 2,400 mg or less of sodium daily.

19-11 Increase the proportion of persons aged two years and older who meet dietary recommendations for calcium.

19-12 Reduce iron deficiency among young children and females of childbearing age.

19-13 Reduce anemia among low-income pregnant females in their third trimester.

19-14 Reduce iron deficiency among pregnant females

19-15 Increase the proportion of children and adolescents aged six to 19 years whose intake of meals and snacks at school contributes to good overall dietary quality.

19-16 Increase the proportion of worksites that offer nutrition or weight management classes or counseling.

19-17 Increase the proportion of physician office visits made by patients with a diagnosis of cardiovascular disease, diabetes, or hyperlipidemia that include counseling or education related to diet and nutrition.

19-18 Increase food security among U.S. households and in so doing reduce hunger.

APPENDIX D

Introduction to Health and Fitness: Washington Administrative Code

WAC 180-50-135 Physical Education—Grade school and high school requirement:

(1) Grades 1-8. Pursuant to RCW 28A.230.040, an average of at least one hundred instructional minutes per week per year in physical education shall be required of all pupils in the common schools in the grade school program (grades 1-8) unless waived pursuant to RCW 28A.230.040.

(2) Grades 9-12. Pursuant to RCW 28A.230.050, a one credit course or its equivalent shall be offered in physical education for each grade in the high school program (grades 9-12).

High school graduation requirement:

The two-credit graduation requirement in health and physical education.

The fitness portion of the requirement shall be met by course work in fitness education. The content of fitness courses shall be determined locally pursuant to WAC 180-51-025. Suggested fitness course outlines shall be developed by the Office of Superintendent of Public Instruction. Students may be excused from the physical portion of the fitness requirement pursuant to RCW 28A.230.050. Such excused students shall be required to substitute equivalency credits in accordance with policies of boards of directors of districts, including demonstration of the knowledge portion of the fitness requirement. "Directed athletics" shall be interpreted to include community-based organized athletics.

http://apps.leg.wa.gov/WAC/default.aspx?cite=392-410-135

WAC 392-410-135: Physical education—Grade school and high school requirement.

(1) Grades 1-8. Pursuant to RCW 28A.230.040, an average of at least one hundred instructional minutes per week per year in physical education shall be required of all pupils in the common schools in the grade school program (grades 1-8) unless waived pursuant to RCW 28A.230.040.

(2) Grades 9-12. Pursuant to RCW 28A.230.050, a one credit course or its equivalent shall be offered in physical education for each grade in the high school program (grades 9-12).

[Statutory Authority: 2006 c 263. 06-14-009, recodified as § 392-410-135, filed 6/22/06, effective 6/22/06. Statutory Authority: RCW 28A.04.120. 00-23-031, § 180-50-135, filed 11/8/00, effective 12/9/00. Statutory Authority: 1990 c 33. 90-17-009, § 180-50-135, filed 8/6/90, effective 9/6/90. Statutory Authority: RCW 28A.04.120 (6) and (8) and28A.05.060 . 85-20-026 (Order 19-85), § 180-50-135, filed 9/24/85. Statutory Authority: RCW 28A.04.120 (6) and (8). 84-21-004 (Order 12-84), § 180-50-135, filed 10/4/84.]

APPENDIX E

Coordinated School Health

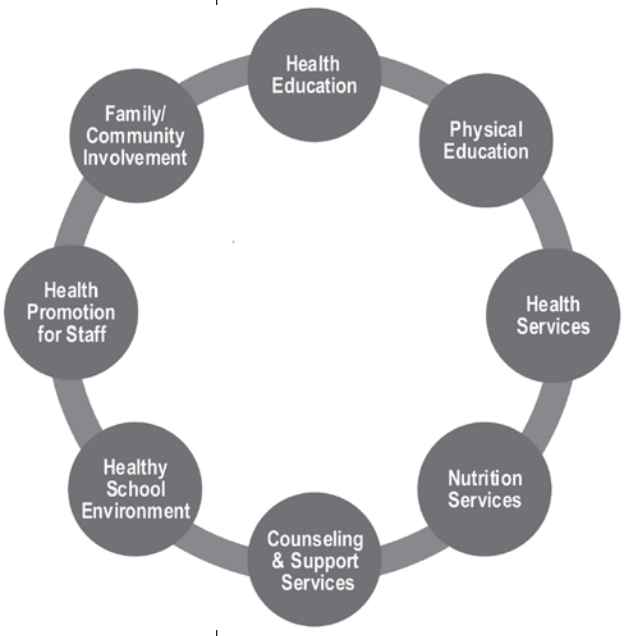
Coordinated School Health (CSH) assures that children are healthy and ready to learn by integrating health across eight components of school life. (www.healthyschoolswa.org)

The CSH model, developed by the Centers for Disease Control and Prevention (CDC), recognizes that schools, families, health care workers, the media, religious organizations, community organizations that serve youth and young people themselves, must be systematically involved in addressing social and health issues that can act as barriers to student learning.

Coordinated School Health Programs are a solution. They work toward long-term results by:

- Helping students develop knowledge and skills to make smart choices.
- Reinforcing positive behaviors throughout the day.
- Keeping students healthy over time.
- Engaging parents, teachers, students, families and communities.
- Supporting learning and school success.

CSH components:



Health Education: A planned, sequential, K-12 curriculum that addresses the physical, mental, emotional and social dimensions of health.

Physical Education: A planned, sequential K-12 curriculum that provides cognitive content and learning experiences in a variety of activity areas such as basic movement skills; physical fitness; rhythms and dance; games; team, dual, and individual sports; tumbling and gymnastics; and aquatics.

Health Services: Services provided for students to appraise, protect, and promote health.

Nutrition Services: Access to a variety of nutritious and appealing meals that accommodate the health and nutrition needs of all students.

Counseling & Support Services: Services provided to improve students' mental, emotional, and social health.

Healthy School Environment: The physical and aesthetic surroundings and the psychosocial climate and culture of the school.

Health Promotion for Staff: Opportunities for school staff to improve their health status through activities such as health assessments, health education and health-related fitness activities.

Family/Community Involvement: An integrated school, parent, and community approach for enhancing the health and well-being of students.

How to integrate nutrition and physical activity across Coordinated School Health

	Nutrition	**Physical Activity**
Health Education	Evidence-based curriculum that supports healthy nutrition behaviors	Evidence-based curriculum that supports physical activity and an active lifestyle
Physical Education	Evidence-based nutrition lessons incorporated into physical education curriculum	Provide a sequential K-12 evidence-based curriculum that promotes an ongoing active lifestyle
Health Services	Address nutrition-related health concerns like diabetes	Address physical concerns that are barriers to physical activity
Nutrition Services	Provide access to healthy foods through school meals and throughout school	Provide recess before lunch, thus encouraging healthier eating habits
Counseling & Support Services	Counsel students with disordered eating or weight concerns	Counsel students with concerns about ability or body-image that interfere with enjoyment of physical activity
Healthy School Environment	Ensure that the nutrition environment provides consistent nutrition messages	Ensure that school playgrounds and facilities are safe, clean and accessible
Health Promotion for Staff	Offer worksite wellness programs that encourage staff to adopt and model healthy eating behaviors	Offer worksite wellness programs that encourage staff to adopt and model active lifestyles
Family/ Community Involvement	Involve parents and community members in setting school nutrition policies	Allow after-school access for communities to use playgrounds, tracks and fields and/or gymnasiums

APPENDIX F

Healthy Eating Guidelines

Dietary Guidelines for Americans, 2005

The Dietary Guidelines, developed by the United States Department of Health and Human Services and the United States Department of Agriculture, provide science-based advice to promote health and to reduce risk for major chronic diseases through diet and physical activity.

Food groups to encourage each day:

Focus on fruits. Eat a variety of fruits—whether fresh, frozen, canned, or dried—rather than fruit juice for most of your fruit choices. For a 2,000-calorie diet, you will need 2 cups of fruit each day (for example, 1 small banana, 1 large orange, and 1/4 cup of dried apricots or peaches).

- **Vary your veggies.** Eat more dark green veggies, such as broccoli, kale, and other dark leafy greens; orange veggies, such as carrots, sweet potatoes, pumpkin, and winter squash; and beans and peas, such as pinto beans, kidney beans, black beans, garbanzo beans, split peas, and lentils.
- **Get your calcium-rich foods.** Get 3 cups of low-fat or fat-free milk—or an equivalent amount of low-fat yogurt and/or low-fat cheese (1½ ounces of cheese equals 1 cup of milk)—every day. For kids aged 2 to 8, the recommendation is 2 cups of milk per day. If you don't or can't consume milk, choose lactose-free milk products and/or calcium-fortified foods and beverages.
- **Make half your grains whole.** Eat at least 3 ounces of whole-grain cereals, breads, crackers, rice, or pasta every day. One ounce is about 1 slice of bread, 1 cup of breakfast cereal, or ½ cup of cooked rice or pasta. Look to see that grains such as wheat, rice, oats, or corn are referred to as "whole" in the list of ingredients.
- **Go lean with protein.** Choose lean meats and poultry. Bake it, broil it, or grill it. And vary your protein choices—with more fish, beans, peas, nuts, and seeds.

Choose healthful fats: Fats are high in calories but necessary in our diets. Limit saturated and *trans* fats which are linked to heart disease. Avoid foods containing hydrogenated or partially hydrogenated fats.

Choose fats that are high in monounsaturated and polyunsaturated fats such as:

- Olive and canola oil
- Olives
- Nuts and seeds
- Peanut butter
- Fish
- Avocados

Sodium and Potassium: Choose and prepare foods with little salt and consume potassium rich foods such as fruits and vegetables.

Alcoholic beverages: If you choose to drink alcohol, do so in moderation. Moderate drinking means up to 1 drink a day for women and up to 2 drinks for men. Twelve ounces of regular beer, 5 ounces of wine, or 1½ ounces of 80-proof distilled spirits count as a drink for purposes of explaining moderation. Remember that alcoholic beverages have calories but are low in nutritional value.

Find your balance between food and physical activity. Regular physical activity is important for your overall health and fitness. It also helps you control body weight by balancing the calories you take in as food with the calories you expend each day.

Be physically active for at least 30 minutes most days of the week.

Increasing the intensity or the amount of time that you are physically active can have even greater health benefits and may be needed to control body weight. About 60 minutes a day may be needed to prevent weight gain.

Children and teenagers should be physically active for 60 minutes every day, or most every day.

For more information about the Dietary Guidelines for Americans link to http://www.health.gov/dietaryguidelines/

MyPyramid.Gov

United States Department of Agriculture has developed the MyPyramid food guidance system for consumers. The system provides many options to help Americans make healthy food choices and to be active every day.

Estimated Daily Calorie Needs

The following chart gives an estimate of individual calorie needs. The calorie range for each age/sex group is based on physical activity level, from sedentary to active.

	Calorie Range	
	Sedentary	Active
Children		
2–3 years	1,000	1,400
Females		
4–8 years	1,200	1,800
9–13	1,600	2,200
14–18	1,800	2,400
19–30	2,000	2,400
31–50	1,800	2,200
51+	1,600	2,200
Males		
4–8 years	1,400	2,000
9–13	1,800	2,600
14–18	2,200	3,200
19–30	2,400	3,000
31–50	2,200	3,000
51+	2,000	2,800

Recommended Daily Amount from Each Food Group

Calorie Level[1]	1,000	1,200	1,400	1,600	1,800	2,000
Fruits	1 cup	1 cup	1.5 cups	1.5 cups	1.5 cups	2 cups
Vegetables	1 cup	1.5 cups	1.5 cups	2 cups	2.5 cups	2.5 cups
Grains	3 oz–eq	4 oz–eq	5 oz–eq	5 oz–eq	6 oz–eq	6 oz–eq
Meat and Beans	2 oz–eq	3 oz–eq	4 oz–eq	5 oz–eq	5 oz–eq	5.5 oz–eq
Milk	2 cups	2 cups	2 cups	3 cups	3 cups	3 cups
Oils	3 tsp	4 tsp	4 tsp	5 tsp	5 tsp	6 tsp
Discretionary calorie allowance	165	171	171	132	195	267
Calorie Level[1]	**2,200**	**2,400**	**2,600**	**2,800**	**3,000**	**3,200**
Fruits	2 cups	2 cups	2 cups	2.5 cups	2.5 cups	2.5 cups
Vegetables	3 cups	3 cups	3.5 cups	3.5 cups	4 cups	4 cups
Grains	7 oz–eq	8 oz–eq	9 oz–eq	10 oz–eq	10 oz–eq	10 oz–eq
Meat and Beans	6 oz–eq	6.5 oz–eq	6.5 oz–eq	7 oz–eq	7 oz–eq	7 oz–eq
Milk	3 cups	3 cups	3 cups	3 cups	3 cups	3 cups
Oils	6 tsp	7 tsp	8 tsp	8 tsp	10 tsp	11 tsp
Discretionary calorie allowance[8]	290	362	410	426	512	648

Sedentary means a lifestyle that includes only the light physical activity associated with typical day-to-day life.

Active means a lifestyle that includes physical activity equivalent to walking more than 3 miles per day at 3 to 4 miles per hour, in addition to the light physical activity associated with typical day-to-day life.

Source: www.mypyramid.gov

APPENDIX G

Defining "Healthy Foods"

Definitions of the term "healthy foods" vary depending on the source and context. For the purposes of the Washington State Nutrition and Physical Activity Plan we have used this term in a general way to suggest foods that provide essential nutrients and support health. This usage is consistent with all of the definitions presented below.

Access to Healthy Foods Coalition

http://www.accesstohealthyfoods.org/index.php?page_id=213

To determine which foods are healthy or healthier, Access follows the 2005 USDA Dietary Guidelines for Americans, from the U.S. Department of Health and Human Services and the U.S. Department of Agriculture, which directly links to the food guide pyramid, a nationally recognized system.

The Access definition for healthy foods:

A healthy food is a plant or animal product that provides essential nutrients and energy to sustain growth, health and life while satiating hunger.

Healthy foods are usually fresh or minimally processed foods, naturally dense in nutrients, that when eaten in moderation and in combination with other foods, sustain growth, repair and maintain vital processes, promote longevity, reduce disease, and strengthen and maintain the body and its functions.

Healthy foods do not contain ingredients that contribute to disease or impede recovery when consumed at normal levels.

United States Department of Agriculture, Federal Drug Administration

http://www.cfsan.fda.gov/~dms/qa-lab8b.html

Manufacturers are allowed to make a "healthy" claim on food labels. However, the FDA's definition of "healthy" differs from the USDA's definition because of the types of foods that are regulated by each agency. Under the FDA, a label may say "healthy" if the food is:

- low in fat and saturated fat.
- limited in amount of sodium and cholesterol.
- provides at least 10 percent of one or more of vitamin A, vitamin C, iron, calcium, protein, and fiber (for single-item foods).
- Raw, canned, or frozen fruits and vegetables and certain cereal-grain products do not necessarily need to meet these criteria and can be labeled "healthy" if:
- they do not contain ingredients that change the nutritional profile.
- they conform to the standards of identity:

    - enriched grain products which call for certain required ingredients (vitamins, minerals, protein, or fiber).
    - meal-type products (large enough [6 ounces] to be considered a meal) provide 10 percent of the Daily Value of two or three of these ingredients, in addition to meeting the other criteria.
- sodium content does not exceed 360 mg (milligrams) for individual foods and 480 mg for meal-type foods.

Other definitions

European Food Information Council: http://www.eufic.org/index/en/

The following was taken from a discussion of the term "healthy foods" by Susan Alderman, United Kingdom. Nutrition professionals avoid using the term "healthy foods" because whether or not a food is healthy depends on what our nutritional needs are, how much and how often we eat, and what else is in the diet. No single food provides all the essential nutrients. A healthy diet includes appropriate portion sizes of a variety of different foods (vegetables, whole grains, fruits, dairy products, legumes, lean meats, poultry and fish and enough fluids like water). A healthy diet reduces the risk for obesity and chronic diseases such as heart disease, stroke, and diabetes. Healthy eating and lifestyle are important to our feeling of well being and enjoyment of life.

http://www.eufic.org/page/en/faqid/what-does-healthy-food-mean/

APPENDIX H

Physical Activity for Healthy Aging

The American College of Sports Medicine, the American Heart Association, the Centers for Disease Control and Prevention and the International Life Sciences Institute convened an expert panel in 1999 to update and develop comprehensive recommendations for physical activity for older adults based on research, best practice, and therapeutic recommendations. Highlights of the recommendations and areas of emphasis for older adults are outlined below. Please see the full report for more details.[1]

Recommendations

The recommendations apply to adults 65years of age or older and adults 50-64 years with conditions that affect movement, fitness or physical activity. Individuals should consult their healthcare provider regarding specific recommendations.

Aerobic Activity

Thirty minutes or more of moderate-intensity aerobic physical activity five days per week or 20 minutes of vigorous-intensity physical activity three days per week or a combination of these.

Muscle-strengthening activity

Eight to ten exercises, with ten to 15 repetitions, should be performed on two or more non-consecutive days per week.

Level of effort should be moderate to high.

Exercises include weight training and resistance exercise for major muscle groups.

Flexibility activity

Perform activities to maintain or increase flexibility, ten minutes on two days per week.

Balance exercise (exercise specific to reduce risk of injury from falls)

Perform exercises that maintain or improve balance.

Benefits of greater amounts of activity

Improved personal fitness.

Improved management of conditions where increased physical activity is therapeutic.

Reduced risks for chronic disease and premature mortality.

Integrate preventive and therapeutic recommendations

Perform activities to prevent conditions from developing and/or treat conditions according to abilities and needs.

Activity plan

Plan includes each type of activity. and how, when, and where each activity is performed.

Plan integrates prevention and therapy for chronic conditions.

Plan is regularly reevaluated to address changes in ability or health status.

Areas of emphasis for older adults

Reduce sedentary behavior.

Increase moderate activity (with less emphasis on attaining high levels of activity).

Take gradual, stepwise approach.

Perform muscle-strengthening activity and all recommended types of activity.

Sustain emphasis on individual-level and community-level approaches.

Use risk management strategies to prevent injury.

Additional Resources

National Institute on Aging. Exercise and physical activity: Getting fit for life. US National Institutes of Health. Age Page. 2007 Available: http://www.nia.nih.gov/HealthInformation/Publications/exercise.htm

National Institute on Aging. Exercise for older adults. US National Institutes of Health. 2002, 2005 Available: http://nihseniorhealth.gov/exercise/toc.html

The Centers for Disease Control and Prevention. Physical activity for everyone. Department of Health and Human Services. 2007 Available: http://www.cdc.gov/nccdphp/dnpa/physical/recommendations/older_adults.htm

The Centers for Disease Control and Prevention. Growing stronger: Strength training for older adults. Department of Health and Human Services. 2007 Available:

http://www.cdc.gov/nccdphp/dnpa/physical/growing_stronger/index.htm

(Endnotes)

[1] Nelson ME, Rejeski WJ, Blair SN, Duncan PW, Jedge JO, King AC, Macera CA, Castaneda-Sceppa C. Physical activity and public health in older adults: Recommendations from the American College of Sports Medicine and the American Heart Association. Med Sci Sports Exerc 39:1435-1445, 2007. Available: www.acsm-msse.org.

FOR MORE INFORMATION:

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